Fortress



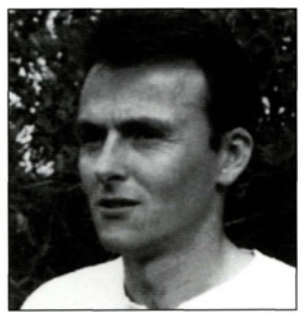
Forts of the American Frontier 1820–91

The Southern Plains and Southwest

Ron Field • Illustrated by Adam Hook



RON FIELD was born in Hertford, England, in 1943 and was educated in Cheltenham where he gained a Bachelor of Education (Hons) degree. He has taught history in the Cotswolds since 1973, and is presently Head of History at the Cotswold School in Bourton-on-the-Water. He was awarded the Fulbright Scholarship in 1982 and taught history at Piedmont High School in California from 1982–83 as part of the UK/US Teacher Exchange Program. He has traveled extensively in the US conducting research at numerous libraries, archives and museums. He is an internationally acknowledged expert on US military history, and was elected a fellow of the Company of Military Historians, based in Washington, D.C., in 2005.

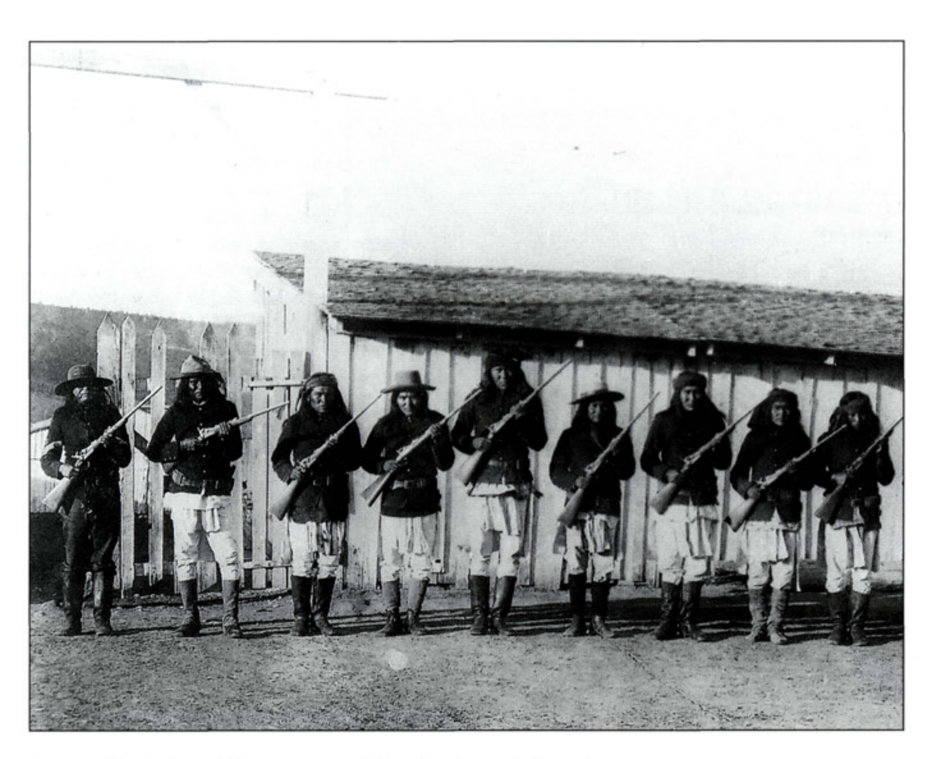


ADAM HOOK studied graphic design, and began his work as an illustrator in 1983. He specializes in detailed historical reconstructions, and has illustrated Osprey titles on the Aztecs, the Greeks, the American Civil War and the American Revolution. His work features in exhibitions and publications throughout the world. He lives in Hailsham, UK.

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Series editors Marcus Cowper and Nikolai Bogdanovic

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Linear measurements

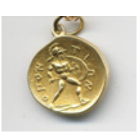
Dimensions of materials and construction are mostly given in the US system of inches and feet rather than metric. To covert these figures to metric the following conversion formulas are provided:

inches to centimeters	multiply inches by 2.540
feet to meters	multiply feet by 0.3058

The Fortress Study Group (FSG)

The object of the FSG is to advance the education of the public in the study of all aspects of fortifications and their armaments, especially works constructed to mount or resist artillery. The FSG holds an annual conference in September over a long weekend with visits and evening lectures, an annual tour abroad lasting about eight days, and an annual Members' Day.
The FSG journal *FORT* is published annually, and its newsletter *Casemate* is published three times a year. Membership is international. For further details, please contact:

The Secretary, c/o 6 Lanark Place, London W9 1BS, UK



Contents

Introduction

During the first two decades of the 19th century, the Southern Plains and Southwest of the North American continent were only occasionally visited by American explorers, trappers, traders and missionaries. All this changed in 1821 when a revolution in New Spain resulted in the overthrow of Spanish rule and independence for Mexico. The newly fledged Mexican Republic lost no time in welcoming American traders to Santa Fe and abandoning the old Spanish system which had prohibited such contact. As a result, American merchants such as William Becknell inaugurated the Santa Fe Trail. With several other enterprising Missourians, he was one of the first to send mule pack-trains westward. Crossing 800 miles of prairie in the fall of 1821, he arrived at Santa Fe, where he was warmly received by Governor Facundo Melgares. The Santa Fe Trail would significantly shape the history of the Southwest. Linked to the Chihuahua Trail, it became an international highway between Mexico and the United States by 1830. As a result, bustling fortified trading posts such as Bent's Fort and Alexander Barclay's Fort were established to protect the traders traveling along its route.

By the 1840s the "Great American Desert" had become part of an inexorable westward expansion of settlement as European pioneers and settlers flooded overland from the Eastern seaboard to fulfill the "Manifest Destiny" of the American nation. As they headed west the whites invaded and absorbed the traditional lands of the Native American. Via a series of Acts passed by Congress between 1830 and 1838, the US government developed a policy of containment of the Native American people, which defined as "Indian Territory" all land west of the Mississippi River not embraced by the borders of Louisiana, Arkansas and Missouri. By 1842 the US Army had removed almost 80,000 Native American souls to an area roughly the equivalent of modern Oklahoma and part of Kansas. Many of those affected were the people of the Five Civilized Tribes, i.e. the Creek, Cherokee, Choctaw, Chickasaw and Seminole. It was hoped that a "Permanent Indian Frontier" guarded by a line of military forts would separate the Indian from the white forever. The posts built to police the southern end of this frontier were Fort Jessup, established near the Sabine River in Louisiana in 1822, forts Gibson and Towson, erected in Indian Country in 1824, and Fort Washita, also located in the same region in 1842 but destroyed by fire in 1865.

Fort (originally Cantonment) Gibson became the base of operations for three important expeditions to the Plains, all of which were aimed at persuading the untamed tribes to conclude peace treaties with the US. Those of 1832 and 1833 failed. The third, known as the Dragoon Expedition, set out in 1834 under the command of Brigadier General Henry Leavenworth, who died of fever. However, his successor, Colonel Henry Dodge, met with the Kiowa, Comanche and Wichita Indians, and persuaded them to send delegates to Fort Gibson for negotiations. The result was the conclusion in 1835 of the first treaties with the so-called "wild" tribes. The Plains Indians promised not to molest travelers on the Santa Fe Trail and to cease hostilities with the immigrant tribes.

Following the establishment of the Republic of Texas in 1836, and the Mexican–American War of 1846–48, the lands and wealth acquired from Mexico lured forth many more emigrants to the Southwest. The resulting emigrant trails first breached and then destroyed the "Permanent Indian Frontier." These newcomers also encroached on the already established East Texas fur trade run by the likes of Holland Coffee and Able Warren, who had operated trading posts on the Red River since the mid-1830s. To protect settlers on the Texas frontier,

the US Government constructed a line of forts in 1848–49. The chain extended more than 800 miles and included Forts Worth, Graham, Gates, Crogham, Inge (originally Camp Leona) and Duncan. Such an enormous area could not be defended effectively with the meagre military forces assigned to it, and it soon became necessary to erect another line of military installations 200 miles farther west in order to keep pace with the rapidly advancing settlers. Built between 1850 and 1852, this outer chain of posts consisted of Forts Belknap, Phantom Hill (officially known as the "Post on the Clear Fork of the Brazos"), Chadbourne, McKavett, Mason and Clark (originally Fort Filey), plus Camp Cooper. Both lines were occupied, and an attempt was made to coordinate one with the other in an elastic defense system against the marauding Kiowas and Comanches.

Other posts, including Fort Davis, Camp Hudson and Camp Verde, were established in southwestern Texas in 1854. The latter post was nick-named "Little Egypt" following the arrival of 34 camels as part of an experiment devised by George Perkins Marsh, former US ambassador to Turkey, and Second Lieutenant George H. Crosman, to introduce a "camel corps" into the US Army, and a more efficient "beast of burden" to the southwestern United States. The success of the camels was demonstrated by their use during the expedition led by Lieutenant Edward F. Beale to survey a road west to California in 1857. Further expeditions in 1859 and 1860 proved equally as successful. Unfortunately, with the outbreak of the Civil War, Camp Verde was abandoned by Union forces and the Confederates ignored the camels, which were eventually auctioned off or sold.

Further north in New Mexico Territory, Fort Union was built in 1851 to protect the southern end of the Santa Fe Trail (linking with forts Atkinson and Leavenworth). This was the largest military post west of the Mississippi River during the 1850s, and became the major quartermaster depot for the Southwest.

To combat the constant Apache and Navajo raids, a network of other posts was built in New Mexico throughout the remainder of the 1850s. Forts Marcy, Conrad, Stanton, Fillmore and Webster extended from Colorado to the Mexican border. Forts Buchanan and Breckenridge were founded in 1857 and 1860 to police the area acquired from Mexico via the Gadsden Purchase of 1853, and to protect the Butterfield Overland Mail route, which went through the notorious Apache Pass.

Hostilities with Indians erupted in Arizona Territory during 1861 when Lieutenant George N. Bascom attempted to arrest Cochise, chief of the Chiricahua Apaches, for a crime he probably did not commit. Although the attempt failed, blood was spilled on both sides and the enraged Cochise launched a war on the whites that lasted for more than a decade. The alienation of the Chiricahua was untimely indeed. A few months after "the Bascom affair" regular troops were ordered east due to the outbreak of the Civil War, and the forts in Texas were seized and occupied by Confederate forces; they came under regular attack from marauding Indians, who did not discriminate between blue and gray.

In response to the Confederate invasion of Arizona and New Mexico, the "California Column," consisting of Federal troops under Brigadier General James H. Carleton, forced a Confederate withdrawal to San Antonio, Texas. En route they also clashed with hostile Chiricahua and Mimbreno warriors in Apache Pass on July 15, 1862. Only after using artillery were these troops able to force the Indians from stone breastworks defending the precious waterhole. Faced with further threats to his line of communication, Carleton ordered Fort Bowie built at the eastern entrance to the pass. Named for Colonel George Washington Bowie, commander of the 5th California Volunteers, Fort Bowie became a center of operations against the hostile Chiricahuas until the final capture of Geronimo in 1886.

By September of 1862, Fort Sumner was constructed on the Pecos River to guard the Bosque Redondo Reservation containing the Mescalero Apaches, and eventually the Navajo, subdued by Colonel "Kit" Carson. Established on the Canadian River in New Mexico during the same period, Camp Easton, later re-



The major forts and supply bases on the Southern Plains and in the Southwest, 1830–90.

named Fort Bascom, for Lieutenant G. N. Bascom, became the base of operations for Carson's punitive expedition against the Kiowa, which resulted in the First Battle of Adobe Walls on November 26, 1864.

After the Civil War, it was imperative to re-garrison the forts scattered throughout the Southern Plains and Southwest as quickly as possible. The western military establishment was placed under the command of Lieutenant General William Tecumseh Sherman, and his tough little army, consisting mainly of Union veterans, ex-Confederates (called "Galvanized Yankees") and soldiers of fortune, comprised about 11,000 men. Even with the addition of four new cavalry regiments in 1866, it was an inadequate force with which to protect the huge expanse of territory assigned it. By October 1867, a board of officers was appointed "to examine and select new sites for posts on the frontiers." As a result, Forts Concho, Richardson and Griffin were established in central and northeastern Texas, Camp (later Fort) Crittenden was erected in southern Arizona Territory, and Camp Supply was set up in the northwestern Indian Territory. An important bastion in the Texas defense system, Fort Concho occupied the center of the line where the trans-Texas immigrant trails converged, and Indian raiders often attempted to slip through to attack the settlements in the east. Meanwhile, Arizona was still engrossed in an Apache war, which culminated in the massacre of about 85 Aravaipas near Camp (later Fort) Grant on April 30, 1871. Several months later, Lieutenant Colonel George

Crook's campaign commenced and led to the surrender of the Yavapais, or Apache-Mojaves, at Camp Verde, Arizona nearly two years later.

Built as the southern anchor of the Texas defense line in 1852, and to police the Mexican border, Fort Clark provided headquarters for Colonel Ranald S. Mackenzie in 1873 when he conducted a daring expedition to punish Kickapoo and Lipan raiders using Mexico as a sanctuary. Six troops of the 4th Cavalry, guided by 24 Black-Seminole scouts, crossed into Mexico and defeated the Indians, creating an international incident.

Between 1862 and 1886, Fort Bowie served as the main base of operations against hostile Chiricahua Apaches led first by Cochise and then by Geronimo. Cochise finally made peace in 1872, and he and his people were given a 3,000-square mile reservation in southeastern Arizona that included their traditional homeland. After the natural death of Cochise, the Apaches grew discontented with conditions on the reservation and many escaped to terrorize white settlers. In an effort to impose more rigid control, the Federal Government closed the Chiricahua Reservation in 1876 and moved its remaining occupants to the San Carlos Reservation in the hot, barren, and disease-ridden Gila River Valley. Established on this reservation in 1869, Camp Apache (later Fort Apache) played a key role in the later Apache wars. In the midst of hostilities following the Cibique affair in 1881, the fort came under siege for ten days before the arrival of a relief column.

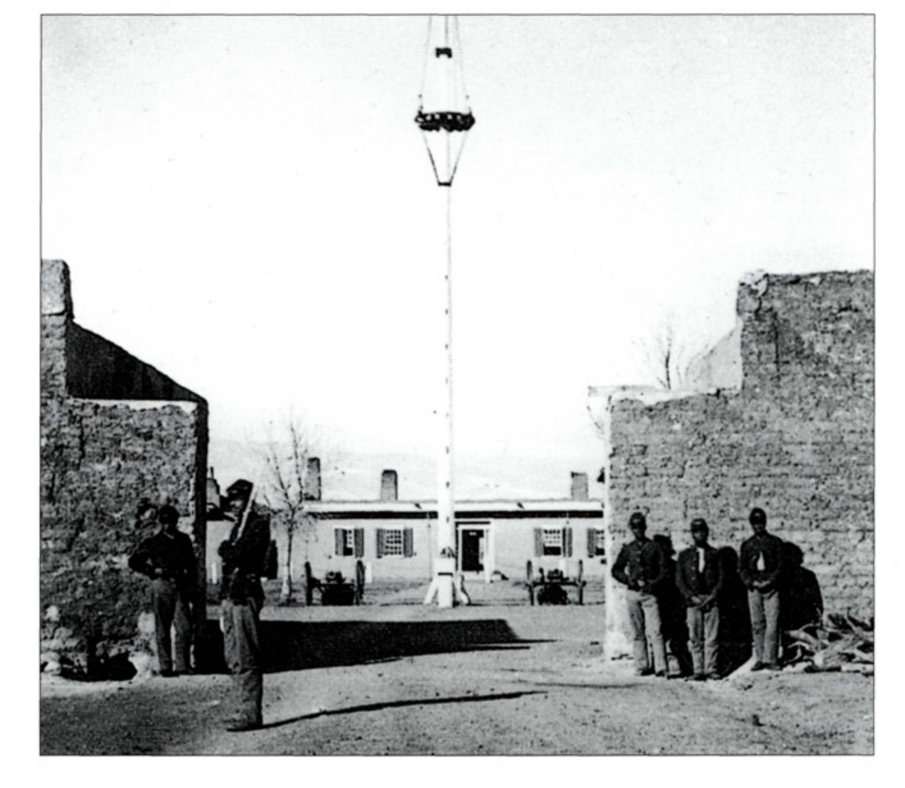
As part of the system of forts guarding the border against raids by Apache renegades based in the Sierra Madre of Mexico, Camp (later Fort) Huachuca also played a prominent role in the campaigns against Geronimo from 1877 until his final surrender nine years later. At this post Captain Henry W. Lawton and Assistant Surgeon Leonard Wood organized the strike force that, throughout the summer of 1886, pursued Geronimo and his band in the Sierra Madre. Lawton's operations proved instrumental in achieving the final surrender of the Chiricahua renegades, and the end of Indian hostilities in the Southwest.

This reconstruction of the stone-built commissary building at Fort Clark, Texas, was painted by western artist Melvin C. Warren in 1956. Fort Clark served as the home of the Seminole-Black Indian Scouts, commanded by Lieutenant John L. Bullis, from 1872 until 1914. (Courtesy of the Fort Clark Springs Association Inc.)



Chronology

1821	Establishment of the Santa Fe Trail.
1824	Dennis Hart Mahan graduates from West Point.
1830	Establishment of the "Permanent Indian Frontier."
1835	August 24: Treaty of Camp Holmes with Kiowa, Comanche and Wichita.
1836	Texas War of Independence.
1846–48	Mexican–American War.
1849	September 9: Navajo Treaty.
1851–60	Navajo Wars fought after the establishment of Fort Defiance in Arizona Territory.
1853	Gadsden Purchase.
1861–65	American Civil War.
1861–72	Cochise War.
1864	November 26: First Battle of Adobe Walls.
1865	October 17: Treaty of the Little Arkansas River.
1867	October 21: Treaty of Medicine Lodge Creek. December 26: fight at Old Fort Lancaster.
1868	June 1: Second Navajo Treaty.
1874	June 27–July 1: Second Battle of Adobe Walls.
1874–75	The Red River War.
1879–80	The Victorio War.
1880	May 14: fight at Old Fort Tulerosa.
1881	August 30: Cibeque massacre. September 1–10: attack on Fort Apache.
1886	September 4: surrender of Geronimo.



Part of a stereo view of the main gate at Fort Garland, Colorado, by photographer Charles Weitfle, of Central City, c. 1880. A wooden sally-port once spanned the gateway between the dilapidated adobe walls. The building at right served as the adjutant's office, while at left stands the guardhouse. Officers' quarters can be seen beyond the post flagstaff. Troopers of the black 9th Cavalry garrisoned the fort at this time. (Collection of William Elswick)

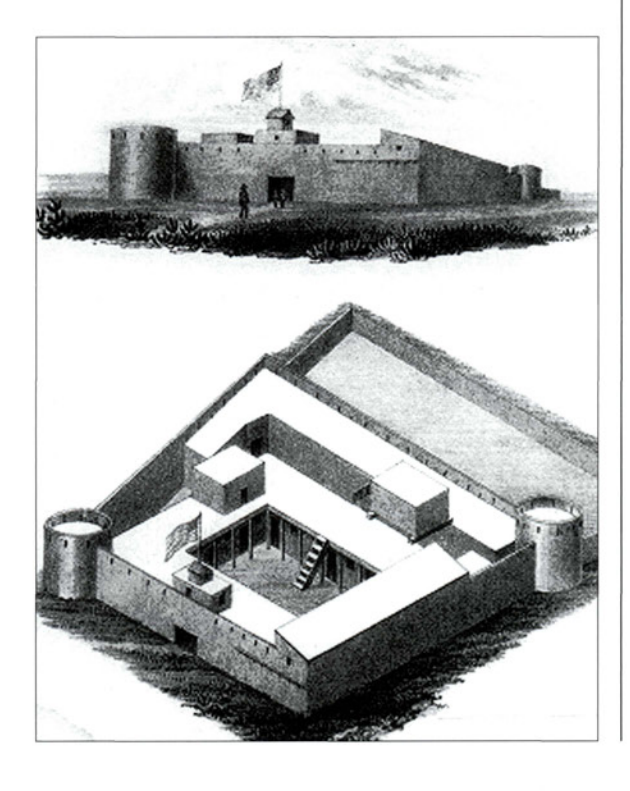
Development of the forts

Trade forts

In 1821, Mexico overthrew three centuries of Spanish rule, and within months US traders forged a link between the Chihuahua Trail and a brand new route, the Santa Fe Trail. In coming years, they would use the two connected routes as a means of moving trade goods from Missouri through Santa Fe to Mexico. According to Josiah Gregg in his classic *The Commerce of the Prairies* US and Hispanic traders transported some $9,000 worth of merchandise south over the Chihuahua Trail in 1822. Even though they faced formidable challenges from the Apache, they increased the trade tenfold within the next two decades. The forts established on the Southern Plains to facilitate this trade included those built by Bent, St. Vrain & Company, on the mountain route of the Santa Fe Trail, and Barclay's Fort, situated close to the junction of the mountain and Cimarron routes.

Of French Canadian descent, William, George and Charles Bent, and their Mexican partner Cerán St. Vrain, established a wooden stockade trading fort, also called Fort William, in 1826. Two years later they began building a larger adobe fort on the same site, which opened for business in 1833 and operated as a key trading post until 1849. An adobe structure protected by 15ft-high walls that were four feet thick, with two corner bastions arranged around a quadrangle, the adobe Bent's Fort measured 170ft on two sides, and 150 and 168ft on the other two sides. In typical southwestern style, a *zaguan*, or watchtower, was built over its gateway, which in military terms was called a sally-port. Besides storerooms, the fort contained a main "reception room" where trading was conducted, carpenter's, tailor's and blacksmith's shops, plus lodging for up to 200 men. It served as headquarters for the expanding trade empire of Bent, St.Vrain & Company, which included St.Vrain's Fort to the north and Fort Adobe to the south. The primary trade was with the Southern Cheyenne and Arapaho Indians for buffalo hides. It was also a staging point for the expedition of John C. Fremont to the Rocky Mountains in 1842, and General Stephen Watts Kearney's march to Santa Fe in 1846. Bent's Fort also served as the Upper Platte and Arkansas Indian Agency, and operated until 1849 when a cholera epidemic, carried westward by gold prospectors, decimated the Cheyenne who supported most of its trade. Reluctant to let the fort be occupied by drifters, William Bent removed its contents, mined it with gunpowder and explosive charges, and blew it up.

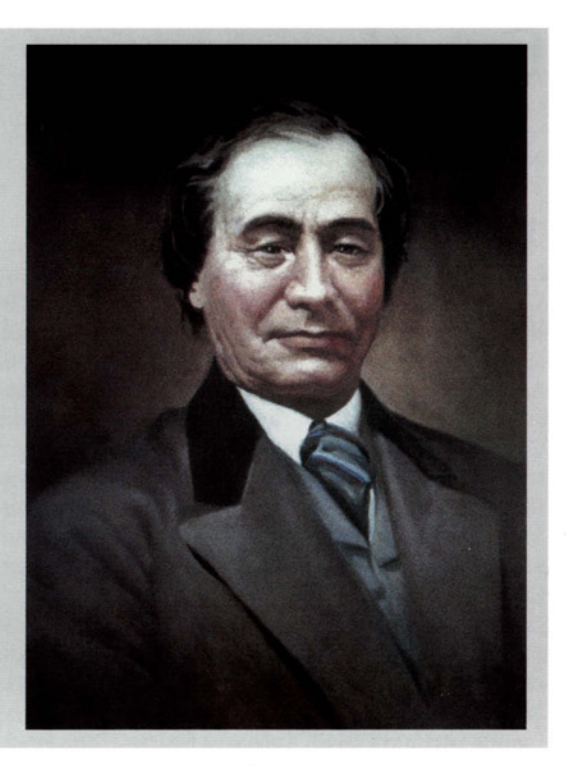
These engravings of Bent's Fort are based on sketches produced by Lieutenant James W. Abert of the US Corps of Topographical Engineers c. 1846. Note the two bastions and rifle loopholes plus the *zaguan*, or watchtower, above the main gate. (LC-USZ62-65638)



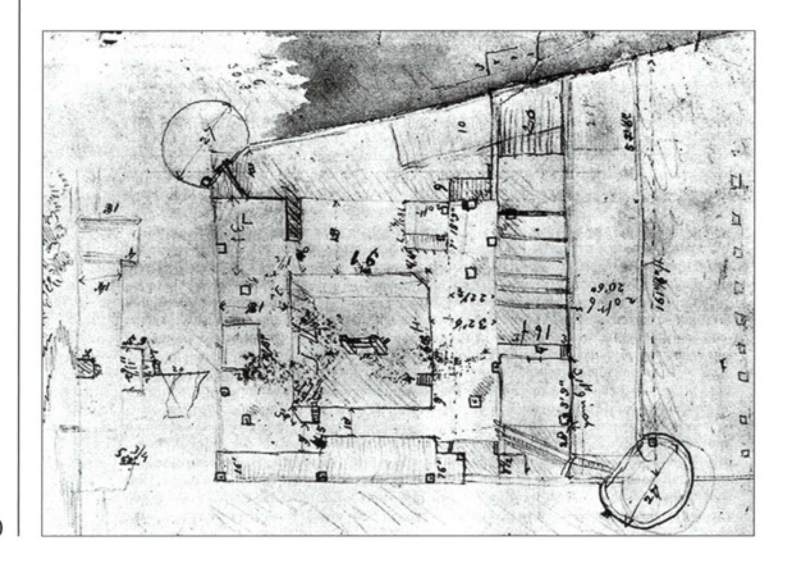
St. Vrain's Fort was established on the South Platte River in 1837 and was originally known as Fort Lookout, and for a short while as Fort George, after George Bent. Modeled on Bent's Fort, St. Vrain's Fort measured 125ft north to south while the total width was 75ft. The main entrance faced almost due east and was guarded by heavy gates, above which was a *zaguan*. The adobe walls were about 2ft thick and 14ft high, and bastions dominated the northeast and southwest corners. Besides a reception room, workshops and storerooms, the interior contained a corral for horses and livestock, plus a cistern lined with lime, near the southwest bastion.

William Bent

William Bent was born in St. Louis, Missouri in 1809, one of several sons of a Missouri Supreme Court Justice. In his early teens he followed his older brother Charles into the fur-trading business, and while in the company of a trapping party, saved two Cheyenne from a Comanche war party. This began his life long association with the Cheyenne Indians, to whom he was known as "Little White Man." In partnership with Cerán St. Vrain, the Bent brothers formed a trading company in 1828 that bought and sold across the Southwest. By 1833, the adobe fort on the north bank of the Arkansas River in present-day Colorado served as the headquarters for several other trade forts include St. Vrain's Fort and Fort Adobe. William married three times, the first and second wives being Cheyenne and the third a half-blood Blackfoot. While serving as an Indian Agent at a new stone fort he had built in 1853, he did much to maintain peace in the region. However, hostilities were renewed as a result of the Pikes Peak gold rush of 1859 and continued intermittently until 1864 when Colonel John Chivington massacred the Cheyenne led by Chief Black Kettle at the Sand Creek Reservation. Considered by this time to be an Indian "sympathizer," William was placed under arrest to prevent him warning his Cheyenne friends, while his son Robert was forced to guide Chivington to the Cheyenne encampment. William's other three children, who were living with the Cheyenne at the time, were all killed at Sand Creek. Broken hearted, William Bent soon after moved to Westport, Missouri where he died in 1869. His remains rest today in the Las Animas Cemetery, south of Las Animas, Colorado. The portrait shown here was painted by C. Waldo Love some time between 1860 and 1869 (Colorado Historical Society X3033).



A third fort was established by Bent, St. Vrain & Company farther down the Arkansas River at Big Timbers in 1846. Situated on a stream that became known as Bent's (now Bent) Creek, company traders originally worked from tepees and later from log structures. The first real fort was built on the site when William Bent and Cerán St. Vrain arrived in person, accompanied by Mexican adobe-makers to replace the log buildings with an 80ft-square compound protected by 9ft-high walls, and only one entrance, called Fort Adobe. Occupation of this post was sporadic, and by 1848 Indian hostility resulted in its closure. Meeting the same fate as what became known as Bent's Old Fort, Fort Adobe was abandoned and blown up in 1849. A familiar landmark, the ruins became known as Adobe Walls and were the site of several fierce battles between whites and Native Americans during the next few decades (see p.49ff).



This detailed plan of Bent's Fort was produced by Lieutenant James W. Abert c. 1846. (US National Archives)

In 1853, William Bent built a stone fort (Bent's New Fort) east of his original adobe one, and continued his profitable trade with the Indians. By 1857, increased Indian harassment prompted Indian Agent Robert C. Miller to withhold the annual allotment of their food, clothing, and other supplies. As Bent was concerned about the possibility of retaliatory Indian raids, he leased his fort to the Army as a storage depot for nearby Fort Wise, and retired from the trading post business.

Built in 1849 by Englishman Alexander Barclay, who learned his profession under the tutelage of William Bent, Barclay's Fort was situated at the junction of the Mora River and Sapello Creek in what shortly afterwards became New Mexico Territory. A visitor in 1853 described this post as "a

large adobe establishment" housing "both men and animals." From the outside it presented "a rather formidable as well as a neat appearance, being pierced with loop-holes and ornamented with battlements." Upon entering, the visitor found that the rooms were "damp and uncomfortable," and all the surroundings looked "gloomy, the hour being twilight." It reminded him of "some old state prison where the great and good of former times have languished away their lives." Still standing by 1861, Barclay's Fort was occupied by Colorado troops during the Civil War.

Some important trade forts were established along the Red River in Indian Territory during the 1830s. Coffee's Station was established by Holland Coffee and Silas Colville in 1833, at what later became known as Preston Bend. Mexican agents attempted to force the evacuation of the post, and in early 1836 it was moved upriver to the mouth of Cache Creek, near the site of present-day Taylor, Oklahoma. In the absence of initial hostility from the Native Americans, the tall log stockade that eventually sheltered the trading post and warehouse of the second site was probably not added until 1839.



ABOVE The *zaguan*, or watchtower, is seen above the gateway in this interior view of the reconstruction of Bent's Old Fort. A fur press is also shown in use by living historians in the center of the plaza. The primary trade at the original fort was with the Southern Cheyenne and Arapaho Indians for buffalo hides. (Courtesy of US National Park Service)

Warren's Trading Post was established by Abel Warren in 1836. Born and educated in Northborough, Massachusetts, Warren arrived at Fort Smith, Arkansas, in 1835 and, hearing stories of the potentially lucrative Indian trade from hunters and trappers, decided to head farther west to set up a trading post. The next year, accompanied by a group of adventurers and Indian guides, he ventured across Indian Territory and established a post on the south bank of the Red River, a mile below Choctaw Bayou. Choosing a spot in timbered streams, Warren's party availed themselves of pine logs to erect a stockade and storehouse, and began to bargain for hides and furs with the Indians. Meeting with only limited success, they abandoned the post the following year.

In 1837 Warren made a second attempt to establish a trade fort, this time north of the Red River. He constructed this second establishment near the mouth of Walnut Bayou (although some historians place it at Cache Creek) in Indian Territory, and operated it for about 11 years. Colonel W. J. Weaver described this second post as being "surrounded by a strong heavy picket in the



BELOW Daniel A. Jenks produced this graphite and ink drawing of an adobe fort built by William Bent in 1853. This post was about 30 miles east of Bent's original adobe fort, by then in ruins. Note the absence of bastions, and what appear to be sentry stands around the parapet. (LC-USZC4-9423)

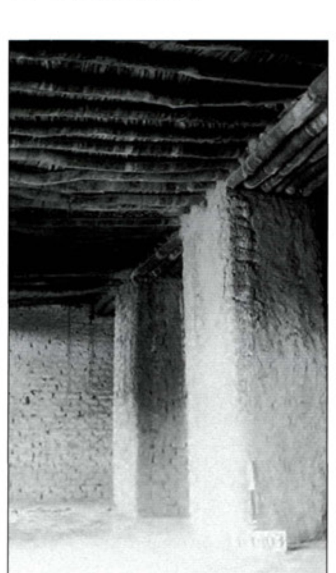
ground about fifteen feet high with a two story log tower at each corner, with portholes for shooting through and covering the approaches to the wooden palisade. On two sides of the enclosure were strong gates for the admission of stock and wagon trains, sheds and warehouses were on the inside walls of the palisades." The tribes that traded there were the Kiowas, Comanches, Wichitas, Tonkawas, Caddos and Delawares, who brought "furs of all kinds, dressed buffalo robes, dressed and raw deerskins, dried buffalo tongues, beeswax, and some had Mexican silver dollars." The trade goods included "red and blue blankets, strips of blue cloth, bright gingham handkerchiefs, hoop iron, glass beads, vermillion, bright hued calico and wampum beads, along with tobacco, gun powder, knives and traps, kettles and other necessities." Warren opened yet another trading post in 1847 or 1848 near the mouth of Cache Creek in Indian Territory. As with his first venture, this post lasted only a short time before it too was closed as trade shifted ever westward.

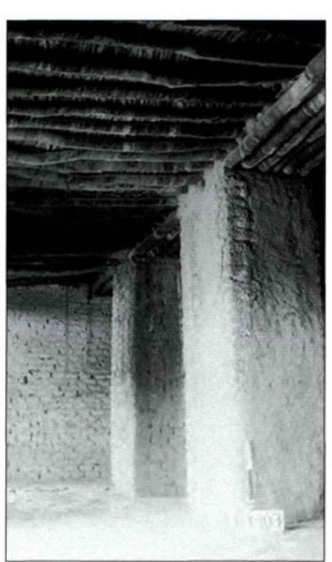
Forts of the Texas Republic, 1836–45

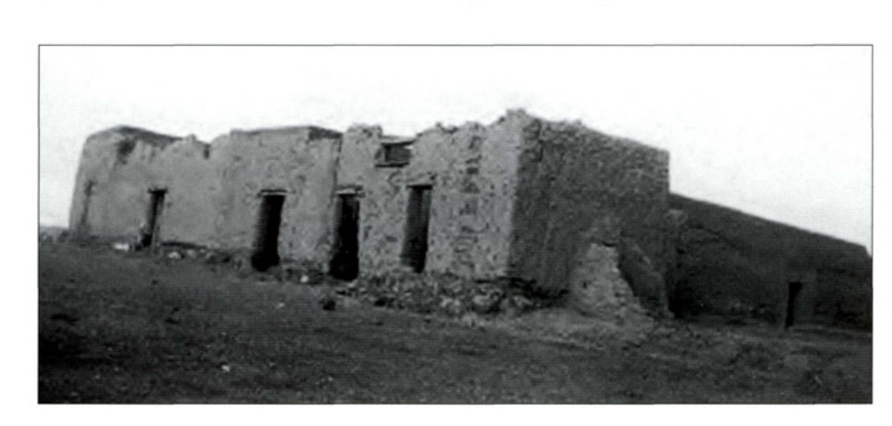
Known originally as the Mision San Antonio de Valero, the Alamo, at present-day San Antonio, was a link in the historic chain of missions with which Spain governed her northernmost empire in North America. The first mission in the area was a small structure erected in 1718 by Father Antonio Olivares. This was soon abandoned and a larger building was put up on the present site. After the second mission was destroyed in a hurricane in 1724, construction of a more permanent stone structure was begun which led to the completion of the Long Barracks in 1727. A stone church was also finished by 1744, but collapsed 12 years later, leading to the erection of the surviving stone chapel.

Following the outbreak of the Texas war for independence in September 1835, the Mexico Army commanded by General Antonio Lopez Santa Anna crossed the Rio Grande River during February 1836 and laid siege to the Alamo, which had been fortified by the 150-strong forces under William B. Travis, a lieutenant colonel of Texan cavalry. The Alamo fortifications were designed by Chief Engineer Major Green B. Jameson and, as far as can be ascertained, consisted of a large semicircular earthen redoubt in front of the main gate which offered covering fire for the entire southern wall. The latter was connected to the chapel by a log and earth stockade. The roof of the central portion of the chapel was torn down and packed against the eastern wall to form a ramp for three 12-pounder cannon. The flat roofs of buildings, such as the officers' quarters and Long Barracks, provided a fire platform along part of the west and east walls of the two-acre plaza, or compound. Elsewhere, the crumbling stone walls were reinforced with rough parapets, and supplemented by about seven guns mounted on earthen ramps. Fieldworks were also dug inside the compound and two 8-pounder guns pointed toward the main gate. Lastly, the interior walls of many of the buildings had been pierced to provide passage from room to room if the main plaza was captured.

BOTH PICTURES Ben Leaton built this fortified adobe trading post on the Chihuahua Trail in western Texas in 1848. Fort Leaton also served as a US Army outpost during the 1850s. The picture below shows an interior view of the adobe pillars supporting the roof of the west granary. These photographs were taken by Marvin Eickenroht in 1936. (LC-HABS TEX, 189-PRES.V, 1-5 & 14)







Most of the original walls at the Alamo were pulled down by the Mexican Army after the successful assault, to ensure that the place could not again be used as a strongpoint. The US Army occupied the site for use as a Quartermaster (QM) depot during the Mexican War, and officially took it over in 1849, following which the chapel and other buildings were restored. Mainly operating from leased buildings elsewhere in San Antonio, the post served as headquarters for the Eighth Military District, and QM depot for more than 20 forts until the outbreak of civil war in 1861. Reoccupying the site in 1865, the US Army finally moved away from the Alamo site in 1879, and established "Infantry Barracks, San Antonio" about two miles northwest of town.

Fort Defiance was the name given by James W. Fannin, Jr., to the La Bahía presidio, Nuestra Señora de Loreto, at Goliad in February 1836, when the fort was repaired and strengthened, primarily under the direction of Joseph M. Chadwick, in preparation for the Mexican advance. The presidio was called Fort Goliad during the earlier command of George M. Collinsworth, whose volunteers initially overpowered the Mexican garrison in October 1835. The stone-built defenses, enclosing the Lady of Loreto chapel, formed a square with bastions at three corners.

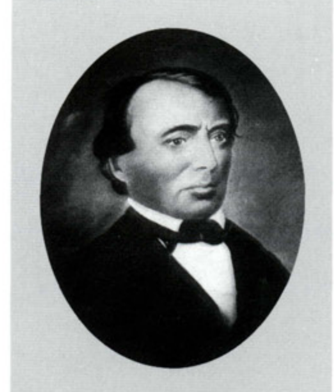
After Texas gained its independence, President Sam Houston authorized the establishment of blockhouses and forts to protect settlers from Indian attacks on the frontier. He also appointed Colonel Robert M. Coleman as commander of a battalion of rangers, with responsibility for building and strengthening these posts. On October 16, 1836, Coleman wrote to Senator Sterling Robertson, describing Fort Colorado and the deployment of his new ranger battalion:

I have selected the most beautiful site I ever saw for the purpose. It is immediately under the foot of the mountains. The eminence is never the less commanding, and in every way suited to the object in view. I have ordered Capt. Batton to build a block house at or near Milam, where he will station one half of his company. The other half of the company under the 1st Lieut. is also ordered to build a block house at, or near, the three forks of the Little River. I shall in a short time commence a block house at the head of San Marcos, and one at the crossing of the Guadalupe, by which means I hope to be able to give protection to the whole frontier west of the Brazos.

Fort Colorado (otherwise known as Coleman's Fort or Fort Coleman) consisted of a pair of two-story blockhouses, a number of cabins which served as barracks, storerooms and service buildings, and a corral, all enclosed by a high stockade fence pierced with rifle loopholes.

The first Fort Milam, on the west bank of the Brazos River, was built in 1834 and called Fort Viesca. In December 1835 it was renamed in honor of Benjamin R. Milam, who had died at the siege of San Antonio earlier that month. Described as consisting of "crude cabins and rough stockade," the post was abandoned

Charles Bent



Born in 1799, Charles Bent worked with John Jacob Astor's American Fur Company during the 1820s before joining with Cerán St. Vrain on an Arkansas River fur-trapping expedition in 1824. The senior partner in Bent, St. Vrain & Company in 1828, he directed the Santa Fe trade and married into a prominent family in Don Fernando de Taos (present-day Taos), using his influence to increase trade between the Americans and the New Mexicans. Following the occupation of New Mexico by American forces in 1846, Charles was appointed Provisional Governor by General Stephen Watts Kearney. Shortly thereafter, he was killed and scalped in Taos during a Mexican/Indian revolt led by Pablo Montoya and Tomás Romero (known as Tomasito) against the American occupation of New Mexico on January 19, 1847. He is buried in the US Cemetery at Santa Fe, New Mexico. (Photo: Denver Public Library Z-130)



The ruins of the Alamo, at San Antonio, Texas, photographed in 1858. The distinctive Mision San Antonio de Valero is on the right and the barracks building stands at left. Note the cannon barrel lying in the foreground. (SPC BAE 4605 01600503)

in 1837. A second Fort Milam was built at the beginning of 1839 by the Milam Guards, a volunteer militia company from Houston commanded by Captain Joseph Daniels, who described it as "about 150 feet square, built of Cedar pickets doublt [sic] banked, eleven feet high with bastions at each angle."

The Little River Fort was officially known as Fort Smith, after Major William Smith, who succeeded Colonel Coleman in command of the rangers on the frontier in December 1836. Established in November 1836, Little River Fort encompassed an area of about half an acre. Six or seven cabins ranged along the north wall of a 9ft-high, post-oak stockade. A two-story, 16ft-square, loopholed blockhouse enabled defenders to fire over the top of the outer wall.

Consisting of a stockade and blockhouse, Fort Houston was also built before the end of 1836 to protect settlers who founded Houston, a pioneer town, now in Anderson County. One who visited this "substantial work" about ten years after it was built described it as measuring 150ft by 80ft, with two rows of cabins inside. As with other posts of the period, it had one or more two-story blockhouses within the stockade so that the defenders might direct their fire down on attackers. With the Indian frontier pushed 100 miles father west by 1841, Fort Houston, and the other works along the San Antonio–Trinity line, were finally abandoned.

Early Texas pioneer Isaac Lyday built a fort near the modern city of Ladonia in 1836. The compound consisted of living quarters, storerooms, and a large community well. As many as 80 families gathered inside the fort during Indian attacks. Due to an increase in Indian raids, the settlement was almost abandoned until Texas Ranger Captain William B. Stout came in 1838 to organize a ranger force. Lyday was elected captain of the company and served until 1839. Fort Lyday continued to shelter settlers until Indian trouble subsided after the Civil War.

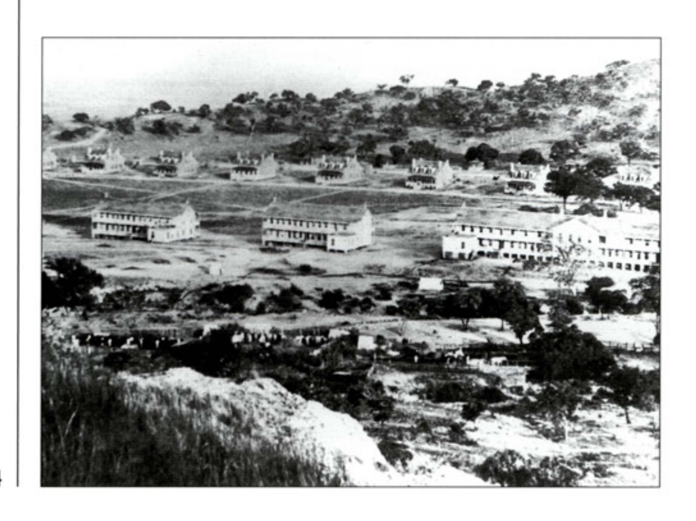
King's Fort, another early frontier fort of the Republic of Texas, was built in June of 1840 by a survey party led by Warren A. Ferris, then Nacogdoches County surveyor. Dr. William P. King, of Mississippi, financed the expedition and accompanied Ferris. Because the fort was located on a favorite hunting ground for the local Indians, settlement was delayed several years by fear of attacks. The fort, with its four cabins and a stockade, was used primarily as a way station and place of refuge for travelers. Also consisting of a blockhouse and several cabins within a stockade, Fort Bird was established by militia under Major Jonathan Bird on the extreme northwestern frontier of Texas in 1841.

The types of military forts

Given the lack of available building materials, particularly in the Southwest, military forts and individual buildings were often constructed from a variety of materials. Of his accommodation at Fort Bayard, New Mexico Territory, c. 1868, Lieutenant Frederick E. Phelps, 10th Cavalry, stated:

> *One wall was built of stones picked up on the adjacent hillside, one was of "Adobe", one of pine logs, set on end, and the fourth of slabs from a saw-mill. The floor was of rough boards, a foot wide; the ceiling of canvas, the roof of mud, the front door of two boards on wooden hinges with a wooden latch, one window with four panes of glass, the sash immovable – this was the parlor.*

Although it is difficult to categorize forts on this part of the frontier as being made of any one type of material, the following survey is based on the main building material employed in specific posts.



Constructed c. 1882–83, the enlisted barracks on the west side of the parade ground at Fort Huachuca, in Arizona Territory, were built of wood, while the officers' quarters on the opposite side were made of adobe. (Fort Huachuca Museum collection: 1886.00.00.53)

Adobe forts and structures



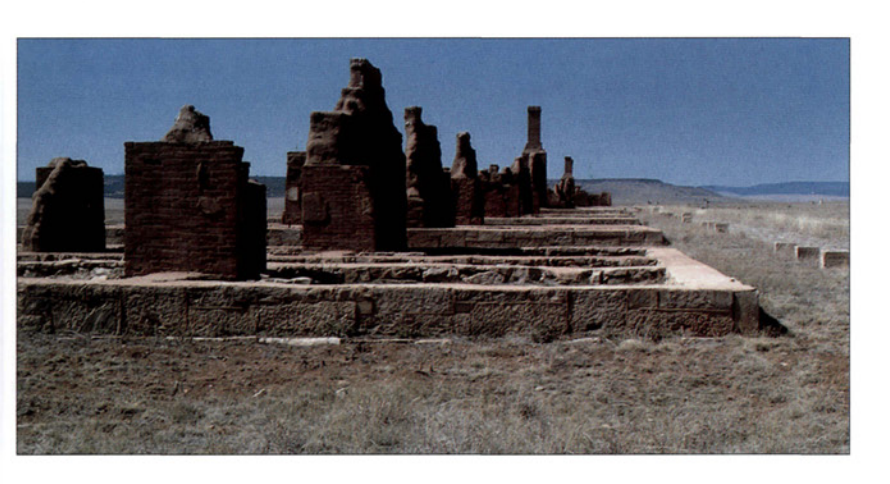
The adobe ruins of Fort Cummings, New Mexico, survive today with Cooke's Peak seen in the background. (Courtesy of Bob Pelham)

Copied from the Native Americans and Spanish, adobe was a very simple yet durable material for fort builders. Easily shaped by hand, it provided excellent insulation from heat and cold, and consisted of materials that were often readily available on the Southern Plains and in the Southwest e.g. sand, clay, water and straw. When building with adobe, a pit was dug to mix the ingredients together. The mud was then packed into wooden molds. The resulting bricks were placed on the ground and dried within four to six weeks, following which they were laid with mud to bind them together, creating a wall about three feet thick. Since persistent rain could eventually destroy an adobe structure, the bricks were plastered with a one-inch thick coating of mud, which was then often whitewashed. Stout wooden beams called *vigas*, and slender poles known as *latias*, were used to make the ceiling. Then adobe would be applied on top of that to create a hard adobe roof, although US military builders often finished off with earth, canvas, or a flat tin roof.

In his memoir *Apache Days and After*, Lieutenant (later General) Thomas Cruse, 6th Cavalry, offered the following description of Fort Thomas in Arizona in 1879:

> *Morning light showed the forlorn drabness of a two-company frontier post. There were two long, low adobe barracks for the men, a two-room adobe shack that, with a couple of wall tents, served as quarters for the Commanding Officer [Captain May H. Stacey, 12th Infantry] and his family, two small cubicles of adobe with a tent extension, a guardhouse and Adjutant's office. All had been built by soldier labor without expense to the government; all had dirt floors and dirt roofs. There were no stables for the horses and mules; only brush shelters to keep off the blistering Southwestern sun.*

Based on a design by General George B. McClellan, Fort Cummings, in New Mexico Territory, was described by army surgeon William Thornton Parker as "the best walled fort in New Mexico or Arizona." Established in 1862 by the California Volunteers under General James H. Carleton, who recognized the need for the post to protect the water supply at Cooke's Spring, this post was completed by Captain Valentine Dresher, commanding Company B, 1st California Volunteer Infantry, by August 22, 1863. Named for Major Joseph Cummings, 1st New



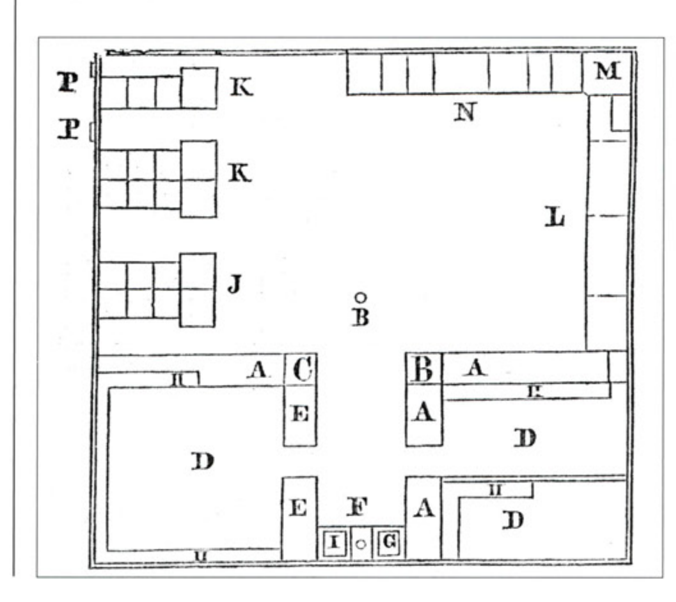
These remains of the officers' row at Fort Union, New Mexico show the stone foundations and chimney-supported front and rear adobe walls. (Courtesy of Harry Frank, Western Impressions Photography)



Navajo prisoners were used to build the adobe barracks at the southeastern corner of Fort Sumner, New Mexico Territory, in 1865. More than 9,000 Native Americans were held captive at Fort Sumner and the surrounding 40-square-mile Bosque Redondo Reservation following removal from their hunting grounds. (Courtesy Palace of the Governors MNM/DCA 1816)

Mexico Volunteer Cavalry, who was killed in a Navaho ambush at Canyon Bonito on August 18, 1863, this post was described by Parker as presenting:

> *an ancient look which made the American flag floating from the tall flag staff in the center of the parade ground look almost out of place. Those "doby" walls about twelve feet in height formed a huge square against which within the enclosure were erected the various buildings occupied by the garrison; i.e. the barracks, the hospital, the officers' quarters, the quarter-master and the commissary departments, etc. Opposite from the main entrance there was a door going out to the hay stacks in the rear. The sentries walked their beats day and night at both entrances and there were also guards at the doors of the quarter-master and commissary departments. To the rear of the fort were huge piles of hay stored for the use of the cavalry and the quarter-master's department. As Fort Cummings was the only walled fort in New Mexico in the sixties, its situation at the mouth of Cook's Canyon, and upon the trail to Arizona and central New Mexico which it guarded, gave it considerable importance.*



Published in 1875, this ground plan shows the layout of Fort Cummings, near the Mexican border in the southwestern corner of New Mexico. Constructed of adobe and containing an area approximately 350 square feet, this post consisted by 1881 of (A) storerooms; (B) company and adjutant's offices; (C) quartermaster's office; (D) corrals; (E) workshops; (F) sally-port; (G) prison; (H) sheds; (I) guardhouse; (J) officers' quarters; (K) commanding officer's quarters; (L) hospital; (M) unfinished room; (N) company quarters; (P) sinks or toilets. (From *Report on the Hygiene of the United States Army, 1875*)

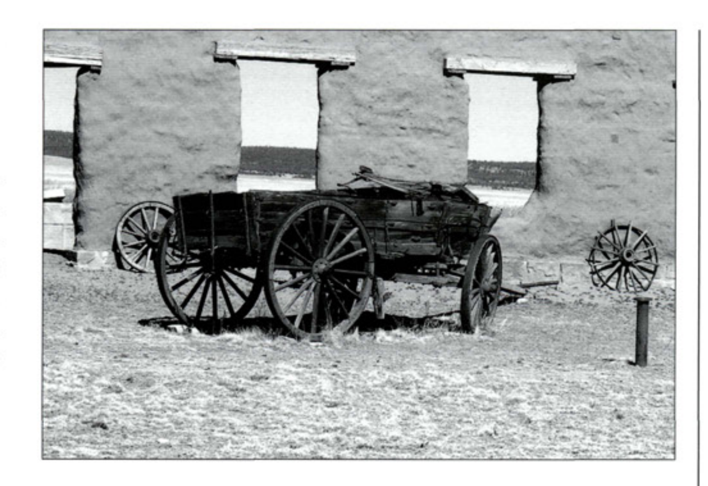
Abandoned by the Army in 1870, renewed activity of the Apache under Victorio caused the Federal government to re-occupy Fort Cummings in 1881. By the following year, tents had taken over most of the fort site, although the romantic adobe ruins of the original fort remained nearby. By this time, the old barracks and quarters inside the fort were uninhabitable and the troops lived in tents outside its walls. The old barracks were used as the quartermaster corral, and the old officers' quarters were patched up to serve as storehouses and workshops.

Completed in 1867, the buildings composing the third Fort Union in New Mexico Territory were constructed of adobe topped with brick trim, while the walls stood on stone foundations and were coated with plaster. The main structures had flat tin roofs, except the hospital roof, which was pitched and shingled.

Upon its establishment by five companies of California volunteers in 1865, Camp (later Fort) McDowell was intended to be the largest and most solidly built post in the Arizona Territory.

However, by 1871 this mainly adobe-built post was sadly neglected, and an inspection report stated:

> *All the buildings were of adobe, with earthen floors, mud roofs, and open fire-places. The roofs were flat, and had mud, sand, and lime cement laid over seguara ribs, which in turn were supported by cottonwood timbers ... But, however carefully built by the California troops, the buildings proved unequal to the heavy washing showers of the summer, and the penetrating rains of the winter months. The roofs leaked almost from their first exposure, and the walls cracked and washed away in place after place, until, in spite of constant repairs, many of the houses became almost untenantable.*



The remains of the mechanics' corral in the depot next to Fort Union. Note the mud-covered adobe and wooden lintels set over the windows and doorways. (Courtesy of Harry Frank, Western Impressions Photography)

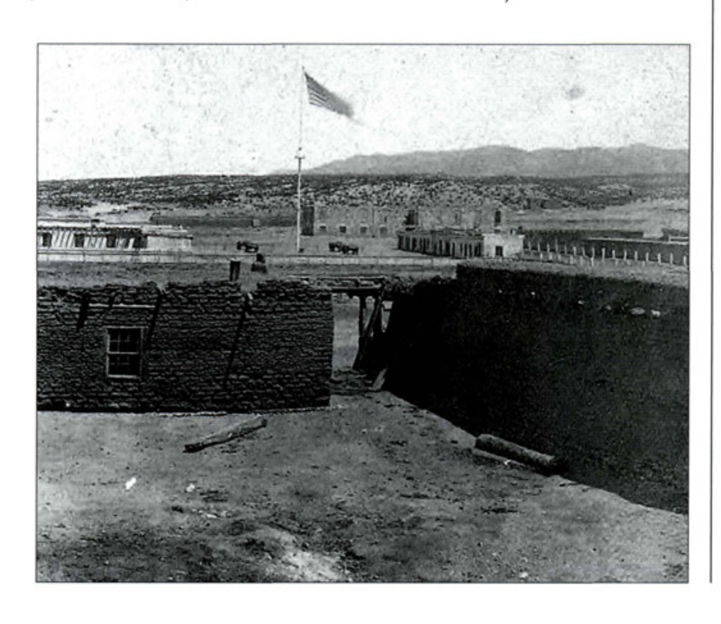
Established to protect the entrance to Apache Pass, in Arizona Territory, all the buildings in the second Fort Bowie, established in 1868, were constructed of adobe, with dirt roofs and, in many cases, dirt floors. The original Camp Grant, in Arizona, consisted of a crudely built series of adobe structures with virtually flat wooden roofs and lean-to fronts. Condemned as "extremely malarious and unhealthy" in a medical report published in 1872, this post was abandoned and a new Camp Grant was established on a *mesa* (flat-topped hill) about two miles from Mount Graham. Also constructed largely from adobe, this post consisted of an 800ft-square parade ground with buildings facing onto all four sides.

Stone-built forts and structures

On March 26, 1849, Fort Duncan was established on the banks of the Rio Grande River by companies A, B and F, 1st Infantry, under Captain Sidney Burbank. Of a visit to this fort in 1856, celebrated architect Frederick Law Olmsted, the designer of Central Park in New York City, described in the *Army & Navy Journal* seeing "a sudden flash of light from the tin roofs of a cluster of military storehouses" as he made his approach. "The American ensign floats over them," he continued, "and through the openings of the bright, green foliage of a mesquite grove, by which they are surrounded, we soon perceive white rows and blocks of white tents, and brown and thatched sheds and cabins, and a broad, flat surface of green turf, with here and there a blue dot and a twinkling musket. Directly we hear the notes of a bugle." Much of Fort Duncan was built using local sandstone, which was described as being light and easy to cut into any required shape. The storehouse, two magazines, four officers' quarters, a hospital and a large barracks building for enlisted men were built from this material. The other barracks was made of adobe. The infantrymen composing the garrison assisted hired workers to build the fort, and all reported to have "suffered greatly from exposure."

Originally built using undressed stone with shingled roofs, Fort Stanton, New Mexico Territory, was described thus in a soldier's diary dated March 19, 1855: "Arrival at an encampment of United States Soldiers, 300 men under the command of Lieut. Col. Dixon S. Miles. They are here for the purpose of building a fort to be called Fort Stanton in commemoration of the

This albumen print from the scrapbook of Western artist James E. Taylor shows Post Santa Fe, from the Governor's Palace, which served as the headquarters building, with the post's flagstaff in the distance. (Smithsonian Institute SPC BAE 4605 01603311)



OPPOSITE **Fort Leaton, Texas, 1855**
Established on the abandoned site of a Spanish mission in 1848, Fort Leaton was a fortified adobe trading post on the Chihuahua Trail in western Texas. Built by Ben Leaton, who dominated border trade with the Apache and Comanche Indians before he died of yellow fever in 1851, this fort was 192 feet square with the south side running parallel to the Rio Grande River. The walls were made of adobe bricks, 18in. long, 5in. thick, and 12in. wide. By laying the bricks crosswise, the builders made the walls 18in. thick. Large doors (1) allowed teams and wagons to drive into the structure. A crenellated parapet surrounded the rooms and fortified the site. Because of its desolate location and the constant threat of Indian attack, Fort Leaton offered much-needed frontier defense. It was the only fortification on the American side of the Rio Grande between Eagle Pass and El Paso before and during the building of Fort Davis, and the US Army made Fort Leaton its unofficial headquarters. Even after the completion of Fort Davis, 80 miles to the north, the Army used the private fort as an outpost for military patrols, and military maps of the 1850s listed Fort Leaton along with official Army posts. The inset A shows details of the west granary's (2) construction; the inset B shows the west elevation of the patio (3); and the inset C shows a detail of the window grilles and shutters (4). The latter were possibly used for trading purposes.

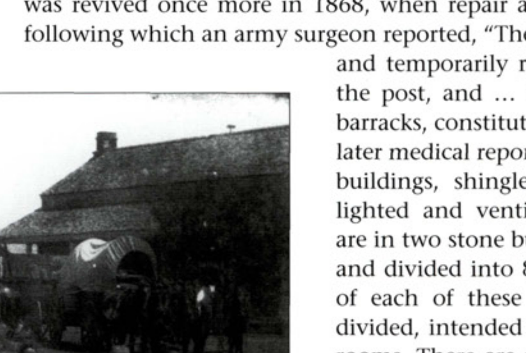


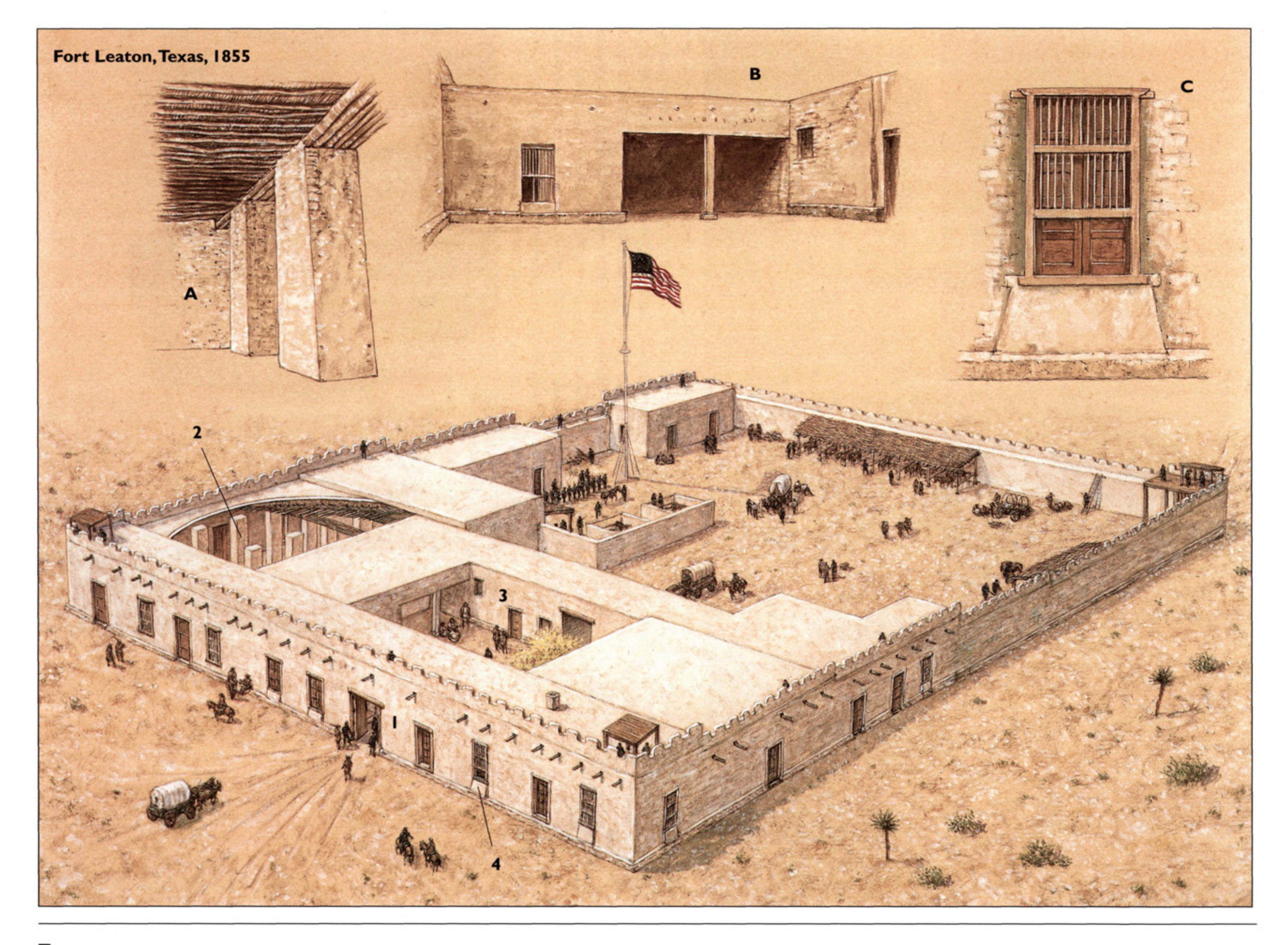
RIGHT The guardhouse appears to be the best preserved structure in most of the ruins of forts in the Southwest. The guardhouse at Fort Union, New Mexico, was built from stone, and one wooden door survives in this row of five cells. (Courtesy of Harry Frank, Western Impressions Photography)

captain who was killed three months ago. General John Garland selected the site for the fort today. The officers all got drunk." Fort Stanton was abandoned and fired by US troops when Confederate forces occupied New Mexico Territory in 1861. With the exception of the walls of the buildings and corrals, the post was destroyed by the occupying forces.

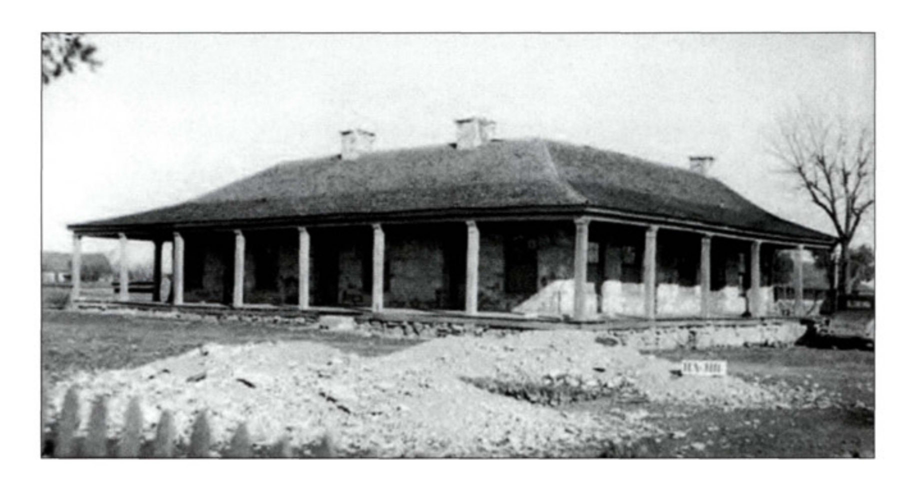
In 1862, a garrison of Union volunteers under Colonel Kit Carson reoccupied the fort and by "covering the walls with rafters and earth roofs" made the quarters tenantable again. The post was again abandoned after the Civil War, but was revived once more in 1868, when repair and reconstruction commenced, following which an army surgeon reported, "These dilapidated walls were rudely and temporarily repaired on the reoccupation of the post, and ... earth floors, earth roofs in the barracks, constituted the quarters of the troops." A later medical report stated, "The barracks are stone buildings, shingled, lathed, and plastered; well lighted and ventilated ... The officers' quarters are in two stone buildings, each 90 feet by 35 feet, and divided into 8 rooms, with two halls. In rear of each of these buildings is another similarly divided, intended for use as kitchens and dining-rooms. There are no bath rooms or water-closets. The commanding officer's quarters contain seven rooms." Work on Fort Stanton was stopped in June 1869, leaving most of the buildings unfinished.

BELOW Migrant families heading west pose for the camera on the parade ground at Fort Concho in Texas. The stone-built surgeon's quarters stands at rear right. (Courtesy of US National Park Service)





Fort Leaton, Texas, 1855



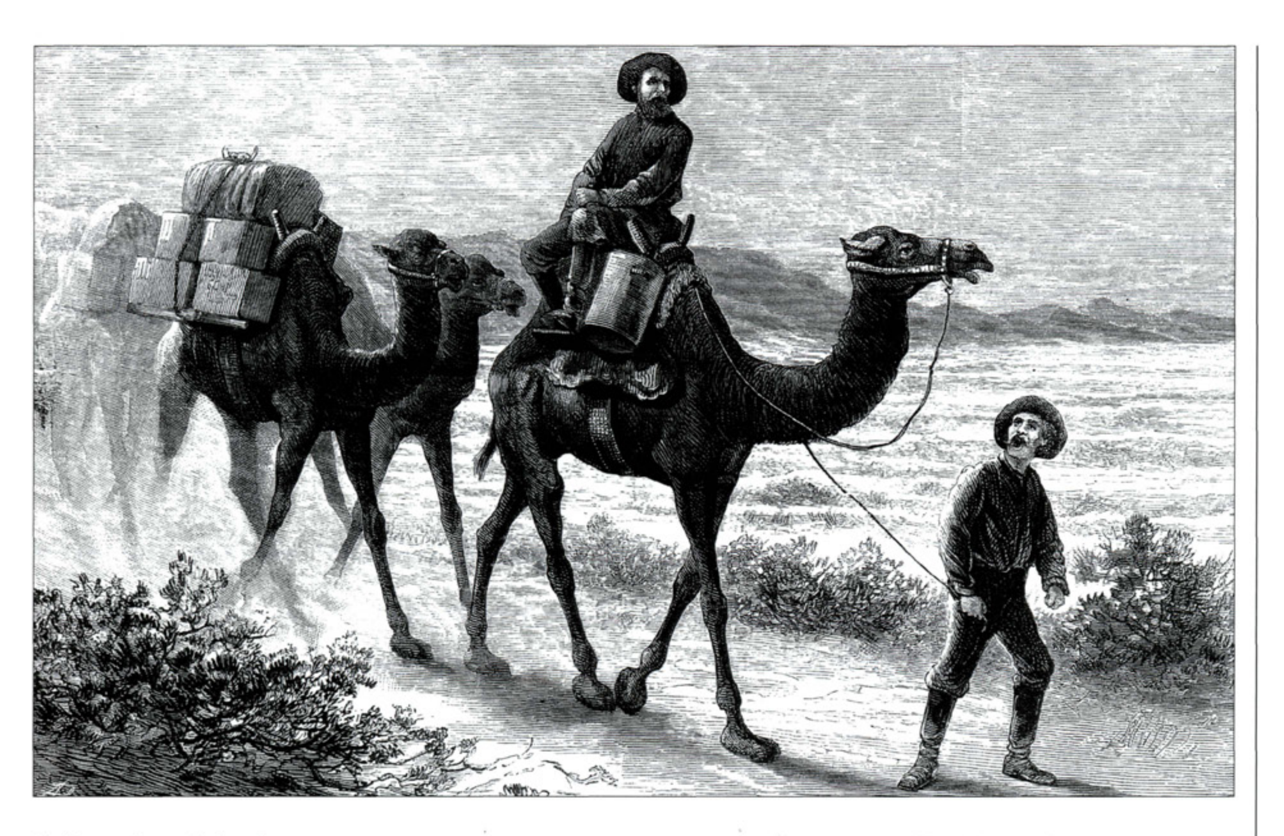
The stone-built headquarters building at Fort McKavett contained the commanding officer's quarters, adjutant's office, sergeant major's and clerk's office, schoolroom of the post children, court-martial room, and the post library. The latter was used at night for school for enlisted men. (US National Archives)

The stonework at Fort McKavett, in Texas, left much to be desired – even in the officers' quarters. An 1874 report stated it was "built of uneven and mis-shaped [sic] stones, of the most varied sizes, all put up in the utmost confusion as to making any joints; three fires in each [building] smoke so badly when the winds blow, which they do nearly daily in the latter part of fall, the entire winter, and early spring, that the occupants are well-nigh blindfolded whenever fires are made in them." Each dwelling received a single stove later that year, which helped relieve some of the problem.

According to a correspondent of the *Army & Navy Journal*, Fort Sill in Indian Territory was "a very pretty and well laid-out post" in 1871. The buildings, barracks, officers' quarters and storehouses were all built from local grey limestone by the enlisted men of the black 10th Cavalry, although wood for the roofs, flooring and fixtures had to be hauled 120 miles in wagons from Boggy Depot. Later, on October 5, 1873, the editor of *The Nation*, a local newspaper, stated of Fort Sill, "This is the best arranged and most complete military post I have yet seen. The barracks, officers' quarters, and quartermaster's building are built of limestone around a square parade ground, of near ten acres area. Hard by are a fine hospital and guard-house."



Remains of the stone-built powder magazine at Fort McKavett in Texas. (US National Archives)



The offspring of camels imported for use by the US Army at Camp Verde, Texas in 1856 were still in use by miners in Nevada in 1877, as this *Harper's Weekly* engraving shows. (Author's collection)

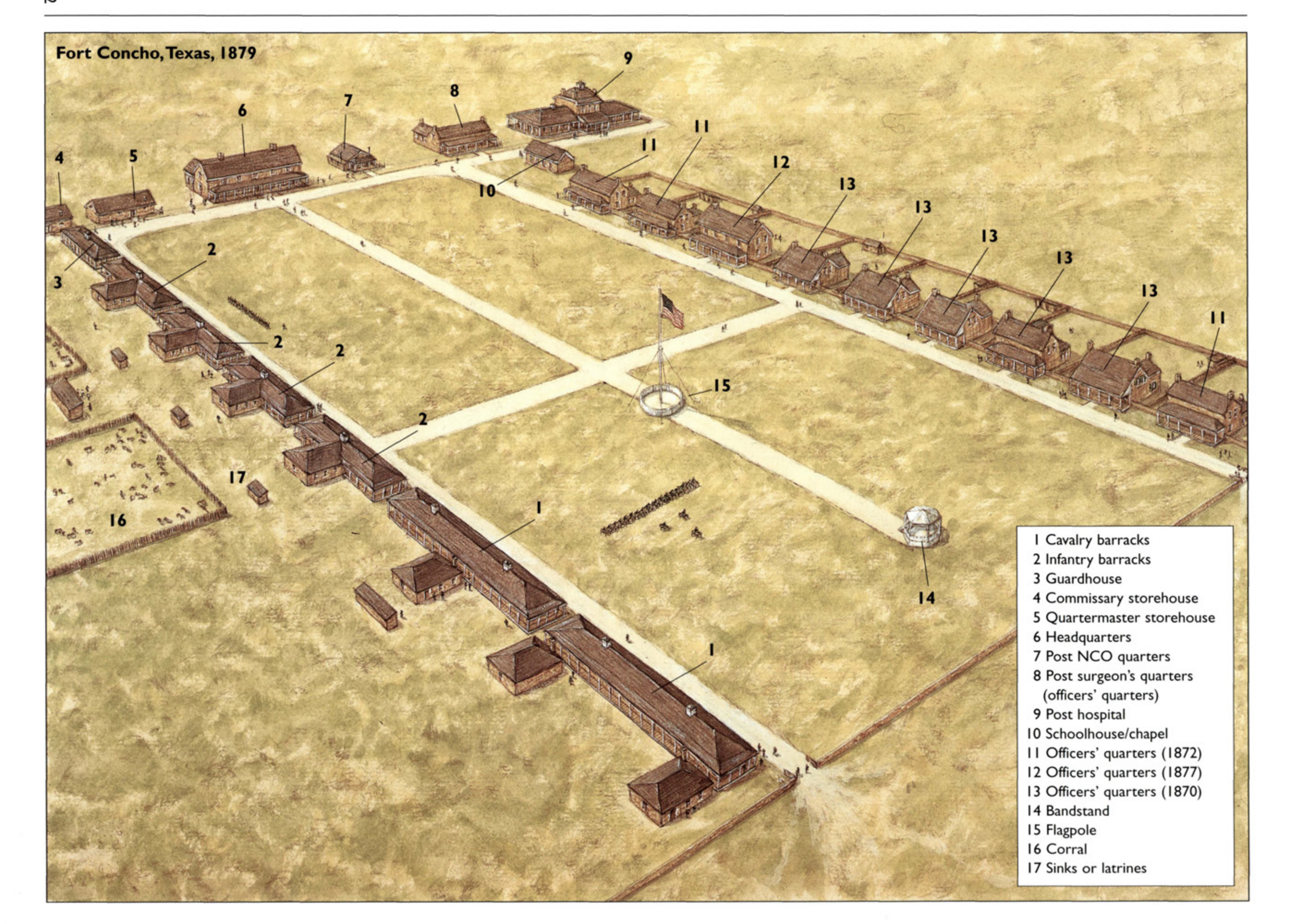
Pisé-work or "pice"

A few forts on the Southern Plains and in the Southwest incorporated pisé-work or "pice" in their building material. This was based on the ancient Roman method of making concrete, which consisted of pounding and tamping stiff earth or clay with small pieces of rock. When the mixture dried it gelled and formed a very hard and durable type of walling. A large barn-like structure called a "caravansary" (also known as a "khan") was built using this method at Camp Verde, Texas, in 1856, to house the camels imported from Africa that year for use as pack carriers. Standing at the center of the post, this strange building was modelled on those found in Egypt. It was rectangular in shape, except for a slight angle made by the north wall, and encompassed three sides of a courtyard.

This building was still in use by troops in 1875 and was described in a report published that year as occupying the south side of a large parade ground. It measured 100ft by 20ft, with a piazza 6ft wide. It was divided up into offices for the adjutant, quartermaster and commissary, and also contained a schoolroom plus three sets of laundresses' quarters. Most of the rest of Camp Verde was built of either adobe or wood by this time, except for one set of company quarters on the west side of the parade, which was also made of concrete. Pisé-work was employed less successfully at Fort Concho, in Texas, during 1868 but was soon replaced by sandstone.

Wooden forts and structures

Originally established as a four-company post, Fort Gibson in Indian Territory was expanded in 1831 to accommodate a regiment, and became the headquarters of the 7th Infantry. The post consisted of a collection of closely built log structures surrounded by a 230ft-square log palisade. Two-story wooden blockhouses, with the upper story protruding over the ground floor, guarded two of the four corners and commanded all four sides. Log and stone barracks and quarters also stood outside the stockade, together with a sutler's store, two hospitals and a variety of other buildings.


Fort Concho, Texas, 1879
1 Cavalry barracks
2 Infantry barracks
3 Guardhouse
4 Commissary storehouse
5 Quartermaster storehouse
6 Headquarters
7 Post NCO quarters
8 Post surgeon's quarters (officers' quarters)
9 Post hospital
10 Schoolhouse/chapel
11 Officers' quarters (1872)
12 Officers' quarters (1877)
13 Officers' quarters (1870)
14 Bandstand
15 Flagpole
16 Corral
17 Sinks or latrines

OPPOSITE **Fort Concho, Texas, 1879**
Situated in the fork of the Main and North Concho rivers in west Texas, Fort Concho was originally established on December 4, 1867 as headquarters for the 4th Cavalry. From 1878 to 1881 the fort was the headquarters of the District of the Pecos. Notable military commanders such as Ranald Mackenzie, Benjamin Grierson, and William "Pecos Bill" Shafter commanded the post, and elements of all four regiments of the Buffalo Soldiers were stationed there at various times. At full strength, Fort Concho supported between 400–500 men made up of four troops of cavalry and four companies of infantry, plus staff officers and support personnel. The first frame buildings at the post were constructed of pecan wood, but this proved too hard for normal use, and only the quartermaster and commissary buildings had been erected by 1868. Meanwhile, the garrison lived under canvas. Constantly changing post commanders, difficulty in obtaining building materials, and a general lack of construction skill among the troops all contributed to the slow progress. Colonel John P. Hatch ordered it rebuilt from adobe, but the inexpert soldiers tried with little success to master the Mexican art, and heavy rain destroyed their brick stockpile that summer. Finally in 1869, it was decided to use sandstone from nearby quarries, and the last stone building was completed that same year. A low stone wall also surrounded the fort to keep wandering buffalo off the parade ground. Civilian stonemasons and carpenters from the Fredericksburg area of Texas were employed in the early years of construction, and soldiers built the later buildings.

Established in New Mexico in 1852, Cantonment (later Fort) Burgwin, also known as Fort Fernando de Taos, was built by Company I, 1st Dragoons, to protect the wagon road between Santa Fe and Taos. According to Private James A. Bennett, who served in several posts in the Southwest, Cantonment Burgwin, showed what "a fort is like in this country." Logs standing next to each other created "an impregnable, windowless façade" measuring 120ft north to south by 220ft east to west. Eight-inch-thick clay roofs covered the inside rooms, whose adobe chimneys gave the false impression of parapets. Inside were two plazas separated by a row of rooms and connected by a passageway. The larger, northernmost court contained quarters, a mess hall, a kitchen, and offices. The second, slightly smaller compound originally stabled the unit's horses, but it may later have provided barracks as well. Outside, several smaller buildings (probably added later) contained officers' quarters, a small dispensary, the guard house, and laundresses' rooms.

Originally constructed in 1852 using thin vertical green logs set on a stone foundation, this "palisado"-style cabin survives today at Fort Clark in south Texas. (Courtesy of the Fort Clark Springs Association Inc.)



Taken from the scrapbook of Western artist James E. Taylor, this albumen print shows a remote military station in Arizona Territory, typical of numerous small outposts throughout the Southwest. Note the size of the garrison flag flying from the staff, and the veranda front on the wooden-frame building. (Smithsonian Institute SPC BAE 4605 01600101)



The first barracks and houses built at Fort Clark, near Las Moras Springs, Texas, in 1852 were a mixture of Mexican-type *jacales*, or crude huts, composed of pole and thatch, plus rough log huts of palisade construction. An officer's wife at Fort Clark wrote in 1855 that her quarters consisted of "a funny little house ... built of green logs with the bark left on them, and they were set up on end, not like the usual log-cabin ... All being green at first, they dried during the intensely hot summer, and very soon the floor and walls were far apart, so that rats and mice came and went without ceremony."

The scarcity of timber caused major problems for fort builders on the Southern Plains and in the arid Southwest. Established near the Brazos River in Texas on July 31, 1867, Fort Griffin was a poorly built wooden post. According to an 1872 report, the quarters were "extemporized from such materials as the country afforded," and were never replaced by "permanent or suitable buildings." The lumber for the commanding officer's quarters, consisting of a log house containing two rooms with a hall between, was hauled from a nearby deserted ranch. The hospital was built in similar fashion. Small temporary wooden structures were erected for four of the five companies making up the garrison. The fifth company was accommodated in a "picket-house" composed of "palisade and daub," with the ends of tree trunks buried in the ground to give support for walls and then covered with a mixture of clay, straw and water. All of these quarters were described as "full of cracks, admitting dust, rain, and snow." After seven years of occupancy they afforded "insufficient protection to the inmates."

The wood used in the construction of Camp Apache in Arizona Territory during 1870 had to be hauled 230 miles from the lumber mills in the Santa Rita Mountains near Tucson. Due to the belief that the post would be temporary, the original wooden buildings were described as being of a "rough and primitive character." The infantry barracks were constructed of "rough-hewn logs, chinked with mud and roofed with boards." There were neither floors nor ceilings. One door at the front, and a small window at the rear, offered the only means of ventilation. A large fireplace served to warm the interior in the winter. However,

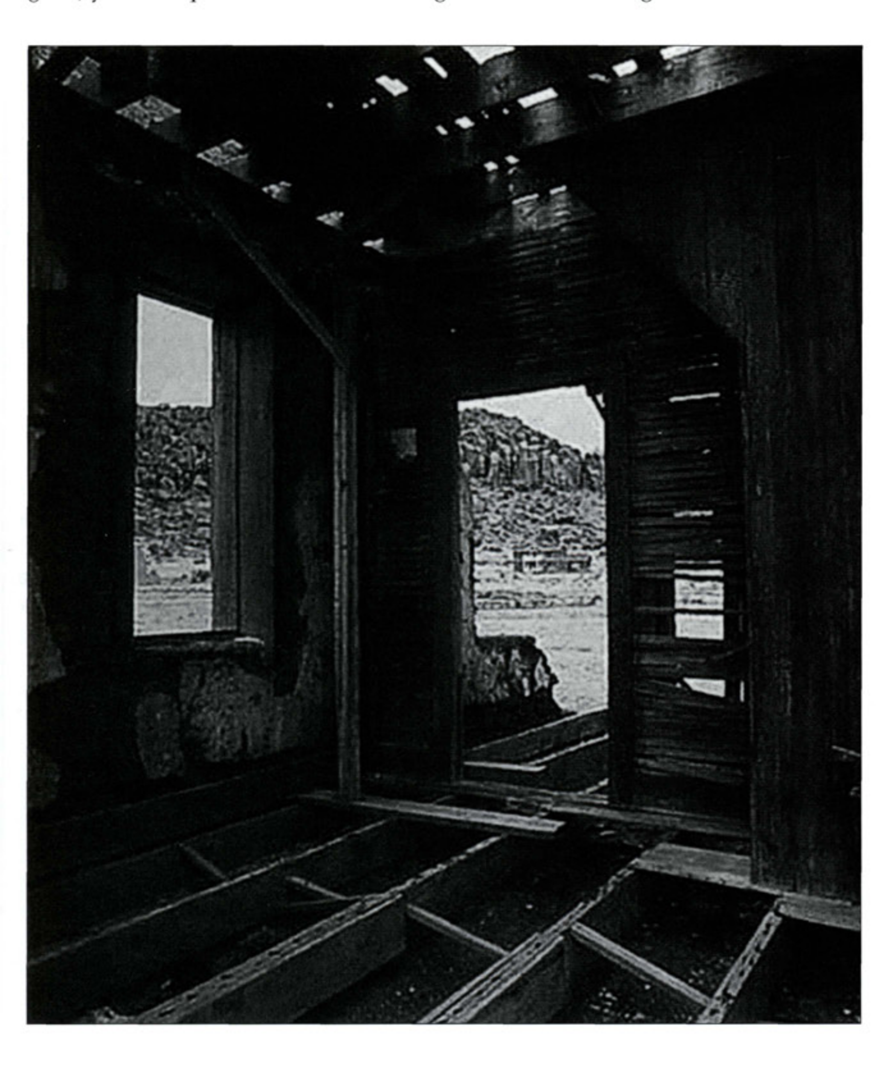
The first Fort Union, established in New Mexico Territory in 1851 to protect the southern end of the Santa Fe Trail, was built from pine logs cut from the nearby Turkey Mountains, and sawn by a horse-powered sawmill carried by supply train from Fort Leavenworth. However, in their haste to build their quarters before the onset of winter, the bark was not removed from the green logs that were, according to Captain Easton, "laid on the ground without any durable foundation." In late 1856 Assistant Surgeon Jonathan Letterman described them as being made of "unseasoned, unhewn, and unbarked pine logs, placed upright in some and horizontal in other houses. The logs were decaying fast." (US National Park Service)



many of the buildings, including the officer's quarters, were improved and enlarged following the arrival of a steam sawmill at the post in 1872.

The pine obtained to build the original Camp Whipple, near Prescott, Arizona Territory in 1864 was presumably growing in reasonable abundance alongside nearby Granite Creek. Composed of a 200ft-square stockade which formed the outer wall of the various buildings enclosed within it, this post was described as consisting of "strong undressed pine logs, the crevices being filled in with mud, and the roofs of all the buildings shingled." Regarding the interior structures, an 1867 report stated that the "offices, warehouses, quarters, barracks ... are continuous, and the post as a whole presents just such a cramped up, confined and huddled appearance, as such a non-descript block-house fort must ... There are wide cracks in the walls, the chinking having fallen out ... No floor boards except in two or three of the best rooms." Condemned and rebuilt in 1869, this post was re-designated a fort in 1870, and became the headquarters of General George Crook, commanding the Military Department of Arizona.

Sometimes the shortage of wood to build forts was exacerbated by civilian restrictions. Having inspected Fort McIntosh, Texas, in 1856, Inspector-General J. K. F. Mansfield blamed the lack of shelter at that post on the fact that there was no lumber to be had without money as "the citizens controlled the limited inferior timber in this quarter" and the department commander refused to spend government money for the purpose. "The suffering of both men and horse was great, yet with quiet submission looking forward to a change for the better."



The view from inside the remains of a wooden barracks building before restoration at Fort Davis in Texas, c. 1976. (US National Archives)

The principal elements of defense

Blockhouses, bastions and towers

Established near the junction of the Arkansas and Poteau rivers in 1817, the first Fort Smith was a stockade fort with a two-story log blockhouse at its north and south angles. In both structures the corner of the upper story floor protruded over the sides of the lower floor, thus offering additional musket fire in the direction of its angles.

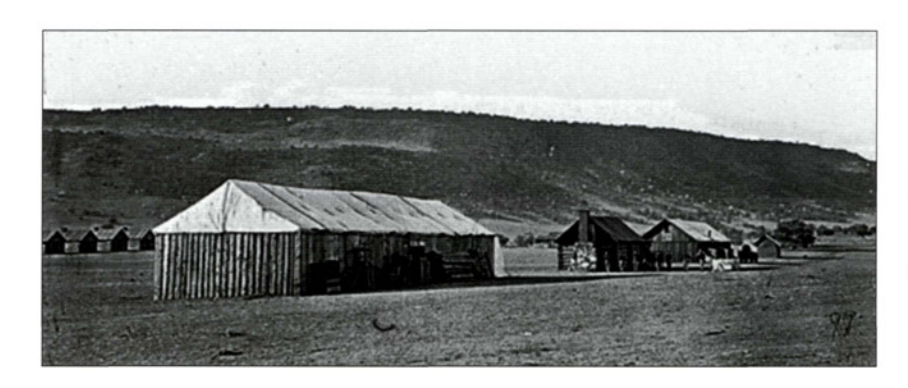
Built upon Ute Creek in southern Colorado in 1852, Fort Massachusetts had blockhouses at its northwest and southeast corners, while the remaining log structures were connected by a flimsy fence. Constructed in 1855 to control the Mescalero and White Mountain Apaches, Fort Stanton in New Mexico Territory consisted of a blockhouse surrounded by an adobe wall. Circular-shaped log bastions protruded from the northeast and southwest corners of the stockade at Camp Nichols, in Indian Territory c. 1865. The mountain howitzers they contained were only ever fired once, during the Fourth of July celebrations that year.

To strengthen the post against threatened attack from the Confederate forces under General H. H. Sibley, Vauban-style full bastions were incorporated into the defenses of Fort Craig, in New Mexico Territory, during the winter of 1861/62. These defenses were so formidable that the Confederates decided against attacking them. Their inability to capture the fort and its stores, even with superior numbers, spelled the beginning of the end of Confederate hopes of securing New Mexico, the Colorado gold fields, and the gold fields and ports of California.

Bent's Fort, the fur-trading post built on the Arkansas River in southern Colorado in 1833, possessed two round adobe bastions. These served as lookout posts, and for storage. Each bastion had a one-pound cannon mounted on the parapet which was used to fire signals or to welcome visitors. They were never used in anger as the fort was never attacked. Built in 1845, the bell tower over the *zaguan* at Bent's Fort served as a watchtower, and was not built until 1845, possibly in anticipation of hostilities with Mexico following the annexation of Texas by the US.

Redoubts, star forts, and demi-lunes (ravelins)

Several earthen forts were built in the Southwest during the Mexican–American War of 1846–48. When General Zachary Taylor took possession of Southern Texas in April 1846 he ordered a redoubt built on the banks of the Rio Grande.



Overcrowding was a constant problem in frontier forts. Formerly used as a quartermaster's storehouse, this large, wooden stockade-built structure situated at the southern end of Camp Apache in Arizona Territory housed one company of infantry in 1872. (US National Archives NWDNS-106-WB-103)

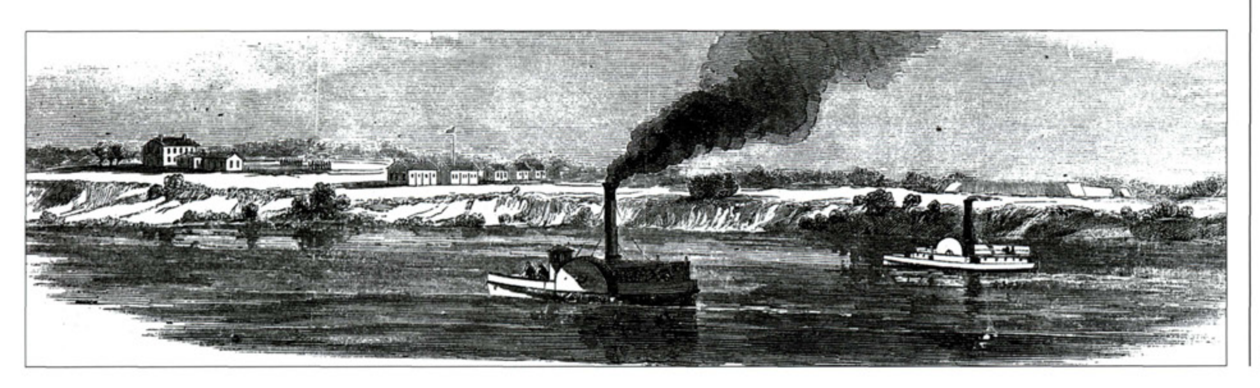
Constructed under the supervision of his Chief Engineer, Captain Joseph Mansfield, this post was initially called Fort Taylor, but was renamed Fort Brown in honor of Major Jacob Brown, who was killed commanding the defense against a Mexican assault on May 7, 1846. Consisting of six palisado bastions with earthen walls 15ft thick and about 10ft high, Fort Brown was surrounded by an 8ft-deep ditch between 15 and 22ft wide. A drawbridge spanned the ditch and permitted access through a gate in the gorge at the rear of the works. This fort became a vital link along the border with Mexico until the outbreak of the Civil War, when it was captured by Confederate troops and subsequently used to guard a valuable shipping port for goods leaving and entering the Confederacy. Regarded as the location for the last shots of the Civil War, the Confederate garrison at Fort Brown held out for about a month after Lee surrendered to Grant at Appomattox Court House in Virginia, and finally surrendered to the 62nd US Colored Infantry on May 13, 1865.



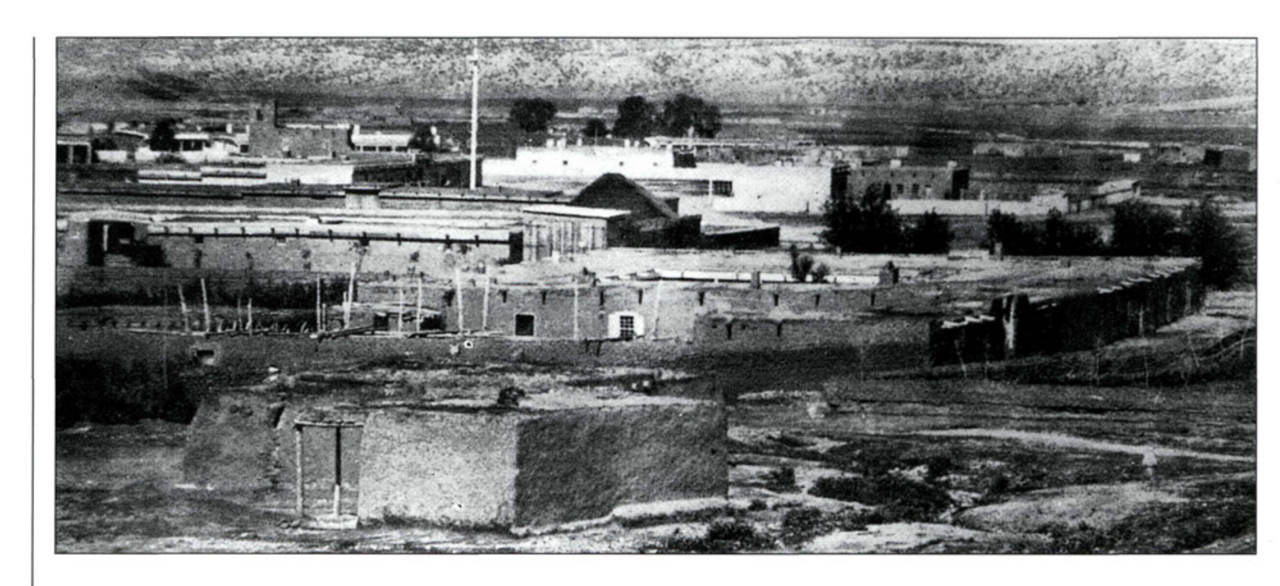
A ground plan showing the earthen redoubt established by General Zachary Taylor in 1846 on the banks of the Rio Grande River facing Matamoras, in Mexico. Initially called Fort Taylor, it was shortly afterwards renamed Fort Brown following the death of Major Jacob Brown, killed in action on May 7, 1846. (From *Report on the Hygiene of the United States Army, 1875*)

Following the outbreak of the Mexican War, General Stephen W. Kearny and his "Army of the West" marched over the Santa Fe Trail, seizing Santa Fe on August 18, 1846. The next day, he ordered two of his engineer officers, lieutenants William Emory and Jeremy Gilmer, to select a suitable site for a strongpoint in case of a rebellion among the subjugated Mexican population. As a result, a redoubt was built on the summit of a flat-topped hill about 650 yards northeast of the plaza in Santa Fe. On what was described as "the only point which commands the entire town," soldiers and hired workmen erected 9ft-high adobe walls and surrounded them with a deep ditch. One of the two log structures inside the compound provided a magazine for storing gunpowder. General Kearny named the new installation for William L. Marcy, the US Secretary of War at that time. Fort Marcy was originally intended to garrison about 280 men, but no quarters were provided for them inside the fort. Instead, they were lodged, and the horses were corralled, in and around the old Spanish military barracks next to the Governor's Palace at the center of Santa Fe. In case of trouble, the garrison would retire to the redoubt and man its guns. As late as 1853, Joseph Mansfield, by then promoted to the rank of Colonel of Engineers and appointed Inspector General, described Fort Marcy as "the only real fort in the territory." It was used in conjunction with the US Army headquarters at Santa Fe until at least 1874, after which it was abandoned.

Established on the eastern bank of the Rio Grande River in Texas in 1849, Camp Crawford had been renamed Fort McIntosh by 1856 and included a square redoubt with bastions at its north and southeast corners, and another bastion halfway along its west face.



An engraving of Fort Brown, Texas, published in *Harper's Weekly* on March 23, 1861. The redoubt can be seen at right. (Author's collection)



This view of the northwest side of Fort Craig in New Mexico Territory shows the sally-port at extreme left and a large casemate at center and right. Note the cannon peering through embrasures along the top of the bastion. The post flagpole and parade ground can be seen in the rear. On July 4, 1863, while most of the garrison was out on a scout, the detachment occupying the guardhouse in the sally-port at Fort Craig disposed of the sutler's whisky while on duty. According to a report in a contemporary newspaper, "the Indians were aware of this and attacked the post. Fortunately the yells of the attackers brought them to their senses enough to beat off the attack." The report concluded, "No doubt the internal fortitude helped give them a reckless daring that not only surprised the Indians but scared them off." (US National Archives)

During the Civil War, Fort Bowie was built by the "California Column" in 1862 to control the spring at Apache Pass in Arizona. Following a lengthy firefight in which the 5th California Volunteers lost two killed and two wounded, and the Apaches sustained about 10 killed (mainly by cannon fire), Major Theodore A. Coulter ordered his 61-man command to throw up a redoubt about 100 by 80ft square, protected by rock breastworks about 4½ft high, and 2–3ft thick. "The total length of wall around the post is 412 feet," reported Coulter. "The works are not of any regular forms, my only object being to build defenses which could speedily be completed, and at the same time possess the requisites of sheltering their defenders, commanding every approach to the hill, and protecting each other by flank fires along their faces." Tents and a 14ft-square stone blockhouse which was loopholed on two sides provided shelter and refuge for the garrison inside the enclosure. In 1868, the post was moved to a plateau southeast of the redoubt and construction began on an open fort with adobe building arranged around all four sides of a parade ground.

In 1861 a massive redoubt with bastions at each corner, and demi-lunes or ravelins at its salient angles, was built about a mile east of Fort Union in order to block the Santa Fe Trail against a Confederate advance into New Mexico. One of the few descriptions of this work, which also possibly overrated its strength, was provided by a Confederate newspaper report published in the *Mesilla Times*, on December 12, 1861:

> *New Fort Union situated one mile due east of the old fort, is considering its position and the material at hand, one of the best pieces of engineering ever done in America. It is an octagon, situated on an open ridge, two miles on each slope, to the valley. The walls are double rows of large pine logs en palisade, 12 feet between the rows, and filled with sod. The ditch is 20 feet wide at the top, 16 feet at the bottom, and 12 feet deep. The abattis is firmly studded with dwarf cedar trees, the branches trimmed short, case hardened with fire and sharpened to a point. These are firmly driven in, and present a bristling array upon which it would be impossible to force cavalry. The cannon enfilade the ditch at all points, and there is no cover for the approach of an attacking party within cannon shot. The magazine, quarters and all the garrison buildings are half basement, bomb-proof buildings. Some of these are entirely under ground ... There are in this post two years supplies of all kinds for two regiments. Ten 12 pounders are mounted, and several guns of larger calibre were being mounted. Kit Carson's volunteer regiment, and about a regiment of regulars are stationed at that point.*

A more accurate description of the Fort Union earthwork was provided by an observer from the Union side when Ovando J. Hollister, 1st Colorado Volunteers, arrived in March 1862: "A simple field-work of moderate size, with bastioned corners surrounded by dirt parapet and ditch, with a slight abattis at exposed points. The armament is poor, consisting mostly of howitzers, but the supply of ammunition is deemed sufficient for any emergency. It has bomb-proof quarters in and surrounding it forming part of the works, sufficiently large to accommodate 500 men besides the necessary room for stores." A contemporary artillery expert pointed out that the work had a dip towards the hills to its west that caused its "whole interior to be revealed." However, the troops left Fort Union and defeated the Confederates before they could reach the post, and thus its defensive capacity was never tested in battle.

Following the failure of the Treaty of Medicine Creek Lodge, constant Kiowa and Comanche raids prompted the construction of a large pentagonal redoubt, plus two smaller ones, at Fort Sill in Indian Territory during 1870. Furthermore, a blockhouse on Signal Mountain, about six miles west of the post, was also built in 1871 as an outpost to warn the fort's soldiers of the arrival of friend or foe. Other redoubts were built at strategic places to guard the road from Fort Dodge, Kansas, to Camp Supply during the same period. Lieutenant Richard T. Jacob, 6th Infantry, described a small earthwork called Cimarron Redoubt that his company constructed on this road, 38 miles north of Camp Supply and about three miles from the Kansas/Indian Territory line:

The redoubt which we built was about fifty feet square. The interior wall was built of burlap bags, filled with earth. Loose earth was filled against this wall on the outside, sloping down to a trench which was about fifteen feet wide. The wall or embankment was about ten feet thick at the base. Bastions were built at diagonally opposite corners. There was a stable for the mules on the inside of the enclosure, built against the wall on the western side. On the eastern side there was a living room and kitchen for the men. Both of these structures were stockaded, the earthen embankment forming one wall of each. The roofs were covered with earth and were a foot or two lower than the walls, so that they could be occupied for defensive purposes in case of an attack. A well was dug on a high creek bank, or second bottom, and the outside of the enclosure, near the gate, which was at the northeast corner.

Just west of the Cimarron Redoubt was another earthwork called Deep Hole. Built by men of the 3rd Infantry under Captain Robert P. Hughes, it was described by the wife of Lieutenant Faye W. Roe as "made of gunny sacks filled with sand, and is built on the principle of a permanent fortification in miniature, with bastions, flanks, curtains, and ditch, and has two pieces of artillery. The parapet is about ten feet high, upon the top of which a sentry walks all the time. This is technically correct, for Faye has just explained it all to me, so I could tell you about our castle on the plains."

Demi-lunes (or ravelin), consisting of a detached fieldwork composed of two faces forming a salient angle, were occasionally incorporated into forts on the Southern Plains. Four large earthen demi-lunes, which doubled as bombproof warehouses, were built fronting the salient angles of the redoubt near Fort Union in 1861. In 1868 the soldiers' quarters outside the northeast and southwest corners of Camp Supply, in Indian Territory, consisted of loopholed log blockhouses forming demi-lunes, over the top of which the troops defending the main fort could fire.



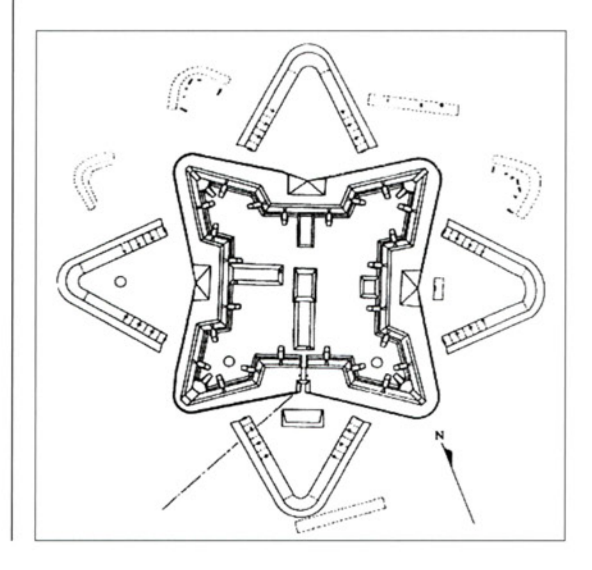
In this 1997 aerial view of Fort Union, New Mexico, the depot stands at left, the fort stands at right, the hospital is seen at extreme right, and the earthen redoubt, complete with bastions and demi-lunes, is in the foreground. (Courtesy of United States Geological Survey)

OPPOSITE **Camp Supply, a wooden stockade fort in Indian Territory, 1869**
An official Army report published in 1875 described Camp Supply as "a base of supplies for troops operating against hostile Indians. During the winter of 1868/69 most of the officers were quartered in tents and the troops in pits from 4½ to 5ft deep, walled with cottonwood logs rising above the surface about 3ft, and covered with logs, straw, and earth." A *Harper's Weekly* correspondent proclaimed it to be, "Without a doubt, one of the most defensible works of its kind on the plains. The storehouses and quarters of the soldiers are constructed of heavy timber, cut in the vicinity of the post, and are loopholed for musketry; the stockade is ten feet high, and the blockhouses [or demi-lunes] are also ten feet in height, with a parapet of four feet, from which an additional fire can be brought to bear on all points of approach. The soldiers' quarters are so constructed that they can fire over the roofs of the buildings, while an additional fire is delivered from the loopholes inside."

Walls, stockades, parapets and sally-ports

Built on "the general plan of Mahan," defensive walls made from adobe, stone and occasionally pisé-work were found more extensively on the Southern Plains and in the Southwest than elsewhere on the frontier. According to Dennis Hart Mahan, who taught civil and military engineering at West Point from 1830 to 1871:

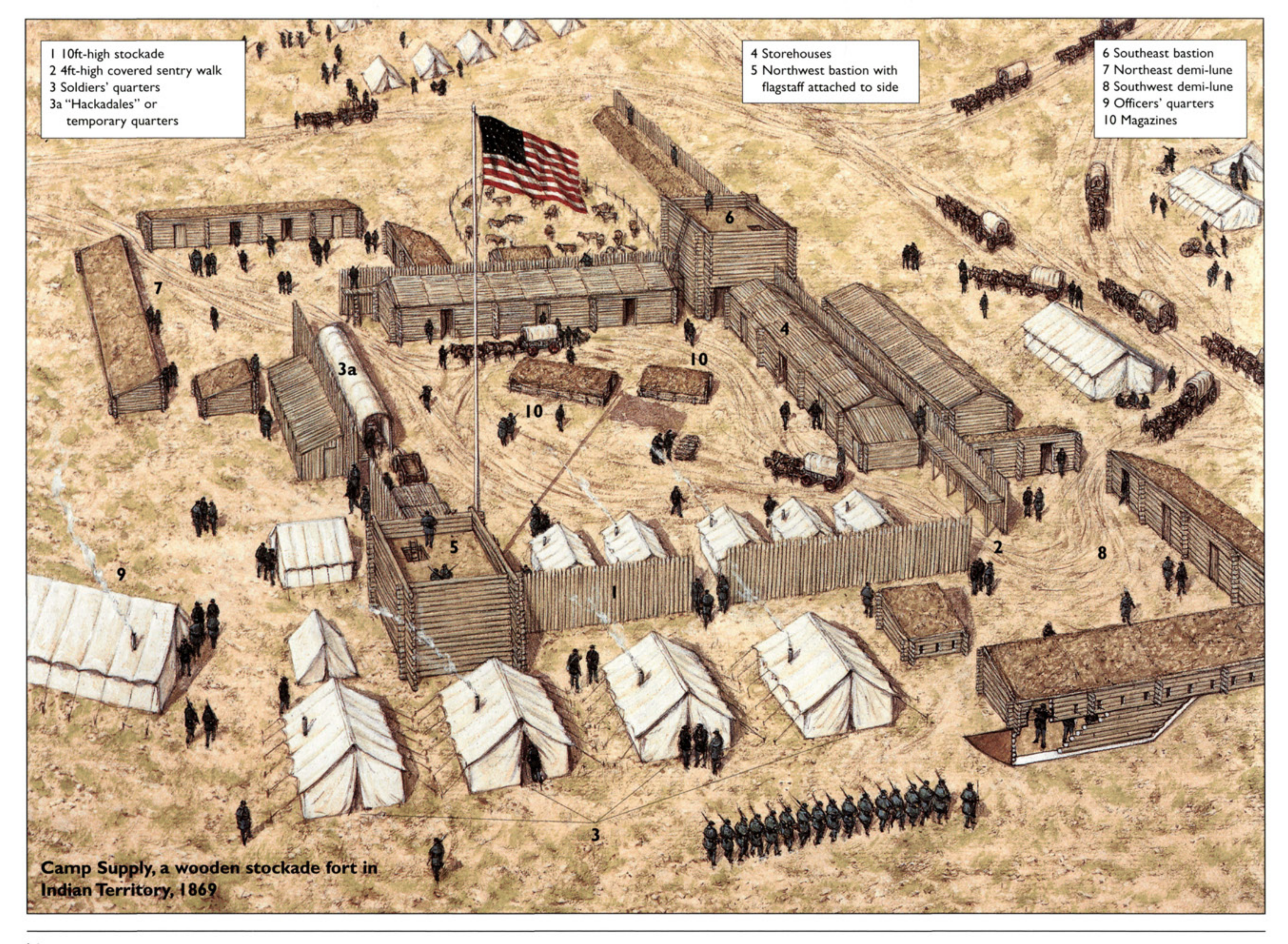
> *If a wall is of brick, or stone masonry, or of mud, and at least six-and-a-half feet high, it may be arranged for defense by cutting loopholes through it, at three feet apart. For walls two feet thick, the interior width of the loopholes should be fifteen inches, the exterior width four inches, and the interior height twelve inches, and the exterior should be arranged to allow the fire to sweep as great a space as practicable. The bottom of the loophole is four-and-a-quarter feet above the ground. A small ditch, about three feet in depth, should be dug on the outside of the wall, and the earth thrown against it, to prevent the enemy from closing on the loopholes. If the wall is less than six-and-a-half feet high, it should be cut down to the height of four-and-a-quarter feet; or else a banquette should be made against it … a ditch of about two feet deep should be dug in front of the wall, to prevent the enemy from reaching the assailed with the bayonet, and to place an obstacle to his climbing over the wall … Walls which are eight feet high, may be arranged with a double tier of fire; for this purpose a banquette of boards, sustained by trestles, or by casks, is made, to enable the assailed to fire over the wall; loop-holes are made near the foot of the wall, and a ditch is dug behind it, to obtain a second tier of fire. In this case no ditch should be made on the outside of the wall, because it might enable the enemy to close on the loop-holes.*



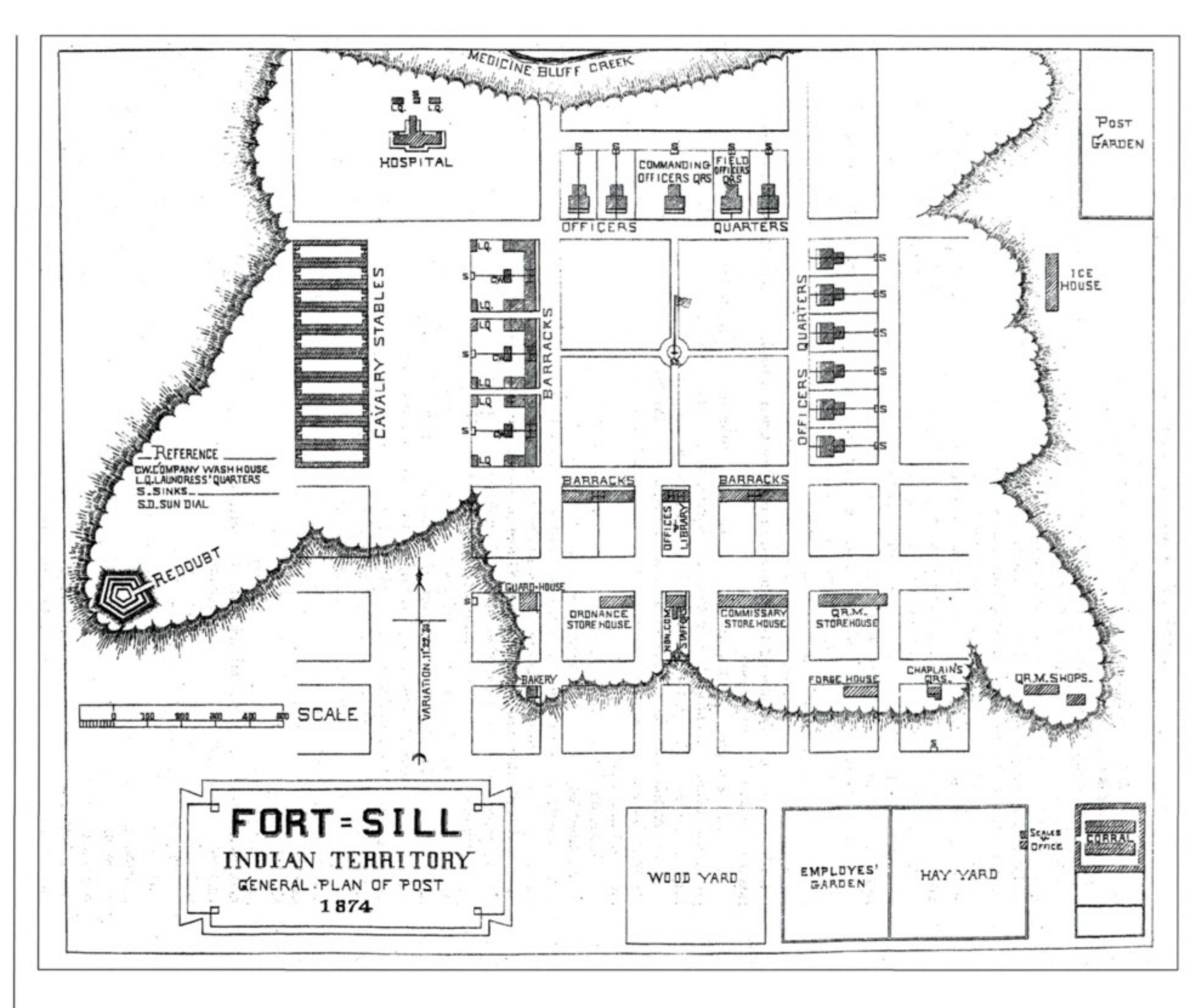
Plan of the earthwork at Fort Union, New Mexico Territory, showing the demi-lunes between the four bastions. (US National Park Service)

In an 1869 report, William Thornton Parker, the post surgeon, described Fort Cummings, in New Mexico Territory, as being "small, compactly built, and inclosed by a wall, 10 feet high, composed of adobe." Although lacking a wall, some adobe forts in the Southwest were afforded defenses because the walls of their individual buildings extended higher than their flat roof, thus forming a parapet. At Fort Fillmore, New Mexico Territory, the post surgeon complained that cannon had been mounted atop his quarters, and would topple the whole structure down with the first shot!

Occasionally referred to as "hackalls," stockades were used in some forts on the Southern Plains and in the Southwest, although the scarcity of timber, and the difficulty of obtaining and operating sawmills to cut it presented the builders with additional problems. According to Mahan, a "stoccade" was composed of trunks of small trees from 9–12in. in diameter, and 12ft long. These were planted side by side in a trench about three feet deep, either vertically or



Camp Supply, a wooden stockade fort in Indian Territory, 1869



Plan of Fort Sill, in Indian Territory, dated 1874. The large pentagonal redoubt built in 1870 to protect the post from Kiowa/Comanche raids after the failure of the Treaty of Medicine Creek Lodge is seen at far left. (From *Report on the Hygiene of the United States Army, 1875*)

slightly inclined towards the enemy. For extra stability, a strip of thick plank, termed a "riband," was sometimes nailed horizontally to each trunk about one foot below ground level before the trench was filled in. Another riband was placed about 18in. below the top of the stockade.

Established on the Southern Plains in 1817, the first Fort Smith was built on a sandstone point about 35ft above the junction of the Poteau and Arkansas rivers. Protected by a 10ft-high and 8in.-thick stockade of squared timber and consisting of an area 132ft square, it was considered to be "good enough against bow and arrow." Camp Nichols, built in Indian Territory during 1865, had a stockade 200ft square, with a 20ft-wide flagstone walk in the center to which horses were hitched. Located in the valley of Ojo del Gallo, in the northwestern corner of New Mexico Territory, the original Fort Wingate was, according to one of its officers, "to be surrounded by a defensive stockade whose north and west sides are flanked by an enclosure containing the magazine, and the south and east sides of the corral and stables." This was to be 8ft high and 4,340ft in total length, and was to be composed of "one million feet of lumber." Needless to say, these defenses failed to materialize and the post was an open fort in its final form.

Heavily fortified main gates, or sally-ports, were occasionally incorporated into forts in the region. The sally-port at Fort Cummings, in New Mexico Territory, was built from adobe and consisted of a "tin covered turret above the Fort gate," a guardhouse on the left of the main gate and a prison on the right. Of the Apache troubles in 1867, Surgeon W. T. Parker recalled:

the guard in the turret could see about the country in every direction, and his post was always considered important. The morning after the alarm, the guard ... discovered a small train in the distance, approaching the Post. It could be seen at once that the wagon train had stopped and that active firing was going on. The Commanding Officer, always ready and prompt to render assistance, ordered out his cavalry detachment with the Hospital Steward for medical officer, and sent it out to relieve them.

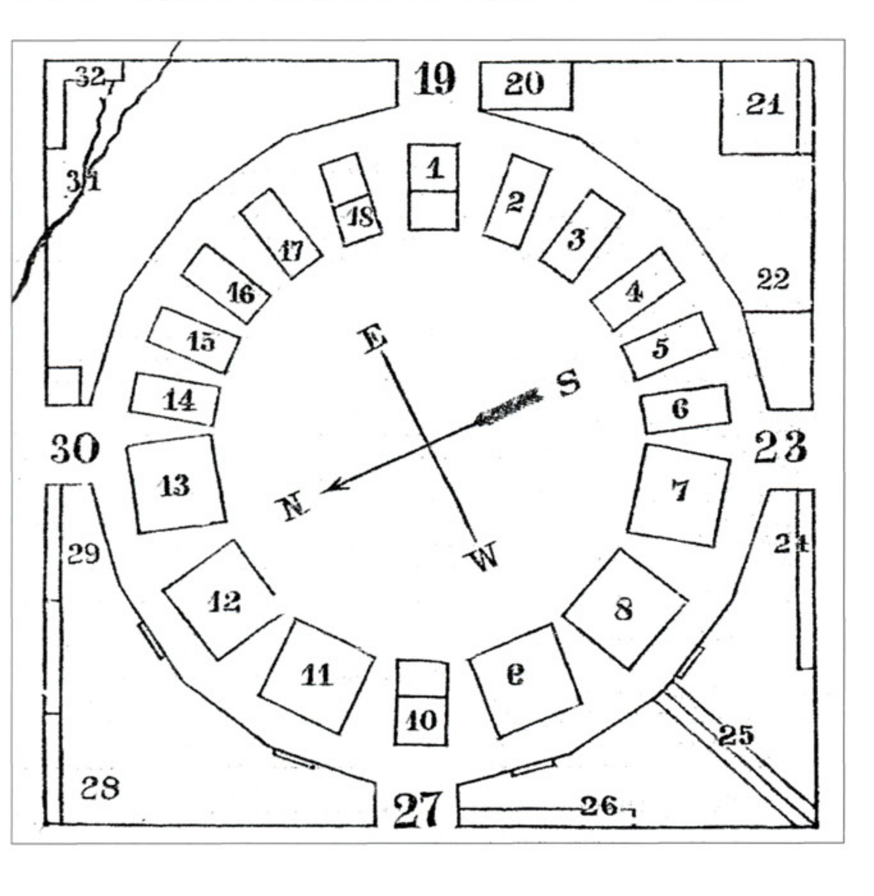
The sally-port at Fort Craig in New Mexico Territory contained a gate wide enough for wagons and mounted troops to pass through in column formation. For a short while, the guardhouse housed in this structure served as the Territorial Prison.

Also in New Mexico, Fort Wingate was originally intended to have a sally-port near each of the four main points of the compass, through which its proposed round parade ground was to be entered.

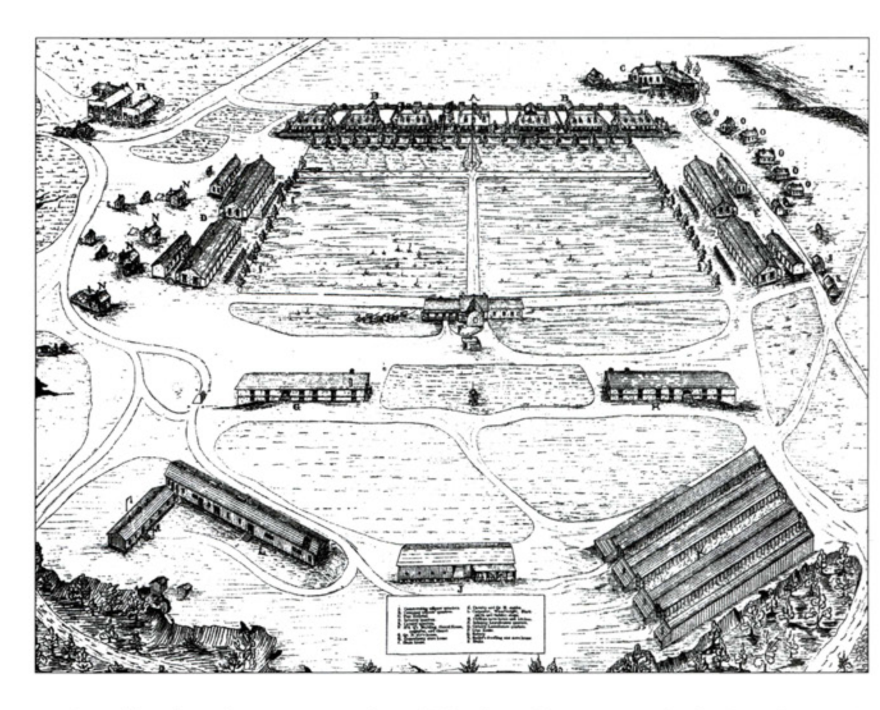
Open forts

Many of the posts on the Southern Plains and in the Southwest consisted of a collection of buildings fronting onto a large parade ground. Dependent on offensive rather than defensive tactics involving active patrolling of the surrounding country, such forts could be enclosed with barricades between buildings in time of attack.

Describing the first Fort Union in 1856, Assistant Surgeon Jonathan Letterman stated that "the buildings being, of necessity, widely separated, cause the post to present more the appearance of a village, whose houses have been built with little regard to order, than a military post." He also pointed out that the terrain on which the fort was built presented a drainage problem, the "water during a heavy rain not unfrequently running into and through some of the buildings."



The proposed layout for the new Fort Wingate, New Mexico Territory, in 1868 was based on a circular plan. Nos. 1 to 6 were to be officers' quarters; 7–9 infantry quarters; 10 guardhouse; 11 and 12 infantry quarters; 13 storehouse; 14 chaplain's quarters; 15 to 18 officers' quarters; 19, 23, 27 and 30 sally-ports; 20 and 22 post trader; 21 hospital; 24 and 26 cavalry quarters; 25 cavalry stables; 28 and 29 infantry quarters; 31 stream; and 32 washhouse. Disapproved at district headquarters, this post was eventually laid out in a more orthodox open parade ground style. (From *Report on the Hygiene of the United States Army, 1875*)



This bird's-eye view of Fort Lyon, Colorado Territory was published in an Army medical report in 1875, and shows the officers' quarters on the north side of the parade, and the infantry and cavalry barracks on the western and eastern sides respectively. The headquarters building is on the southern side, and the quartermaster and commissary storehouses are set back behind it. The grain house stands in the center foreground, while workshops are to its left and stables to its right. Note the sink, or toilet, by the river bank at bottom left. The famous Army scout and Indian fighter Christopher "Kit" Carson ended his days living in one of the cabins behind the barracks at top right. (From *Report on the Hygiene of the United States Army, 1875*)

An officer's wife wrote in the 1870s that the more orderly Fort Lyon, in Colorado Territory, was unlike eastern posts because there was "no high wall around it. It reminds me of a prim little village built around a square, in the center of which there is a high flagstaff and big cannon." Built on a plateau of irregular outline at the junction of Cache and Medicine Bluff creeks in Indian Territory, Fort Sill enclosed a 400ft-square parade ground, while other structures such as the stables and post hospital stood outside the area.

The second Fort Wingate, in New Mexico Territory, was originally laid out in 1868 on "a circular plan" with all 18 buildings facing inwards towards the flagstaff at the center of a round parade ground. However, this design was rejected at district headquarters as it created "too much space to defend," and would have been too expensive to build. The post was eventually built in 1870 on the more acceptable "rectangular plan."

In an 1875 report, the square parade ground at Camp Apache, in Arizona Territory, was described as being "laid out in a peculiar and exceptional manner," having the enlisted men's quarters in the middle, while on three sides were the officers' quarters, the headquarters and administration buildings, and the laundresses' cabins, respectively.

Parade grounds were customarily edged and quartered with "rides" or gravel walks and planted with shade trees. That at Camp Grant in Arizona was 800ft square with a 75ft-wide "roadway" from the line of buildings. Fenced off on each side, this left a central enclosure 650ft square. Excavations at the third Fort Union, New Mexico, have revealed a stone-paved walkway around its large parade.

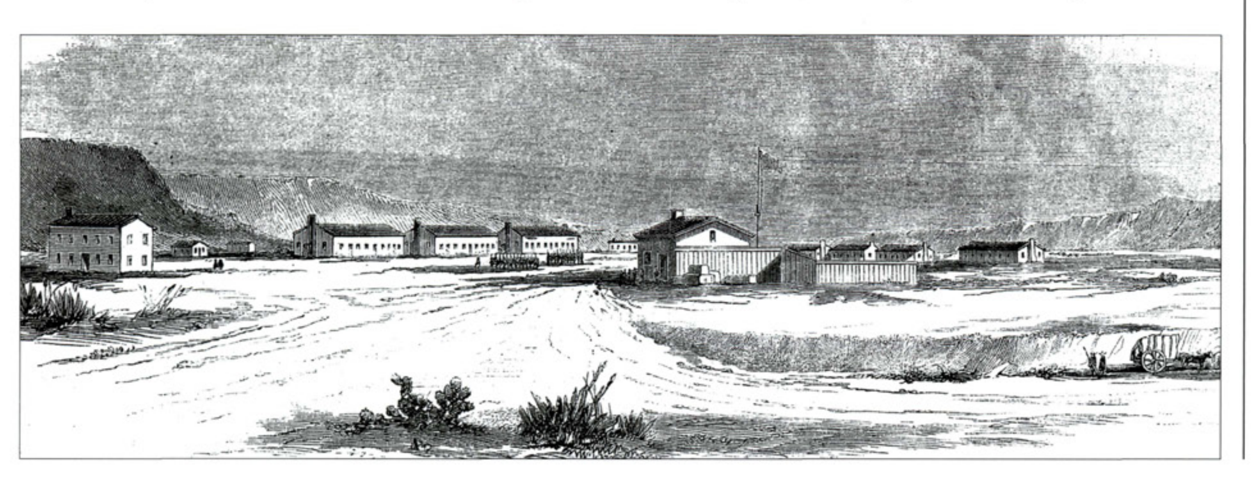
Life in a frontier fort

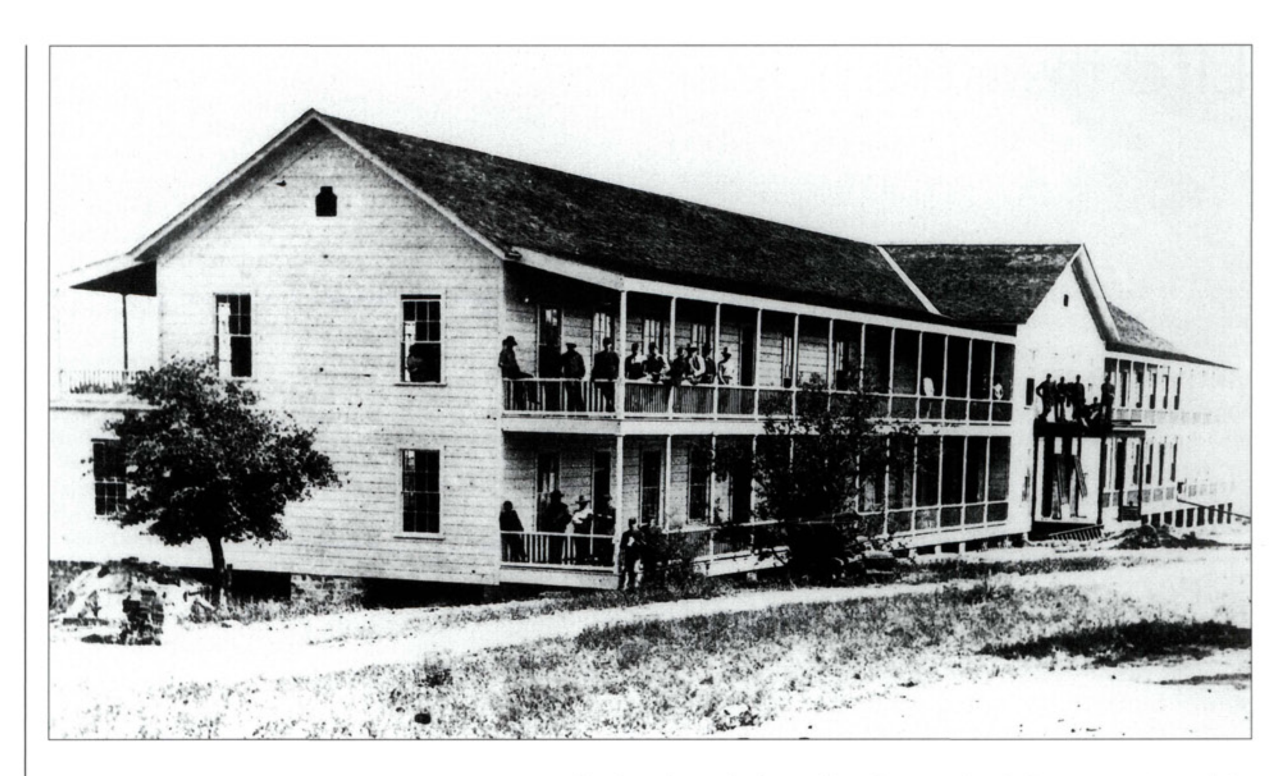
Daily life at a frontier post was regulated by a strict schedule, which usually began at daylight when reveille was sounded, the flag was raised and cannon were fired if available. An officer's wife at Fort Lyon, Colorado Territory, recalled that "a big gun was fired that must have wasted any amount of powder ... then three or four bugles played a little air, which was impossible to hear because of the horrible howling and crying of dogs." The further calls to various activities and duties were sounded by drums and bugles. Morning assembly was followed by the call to breakfast. Next came sick call and calls to duty assignment, drill, target practice, or other tasks, such as repairing or even building the fort. At noon came the call to dinner, followed by more work during the afternoon. The supper call at evening was followed, at sunset, by the lowering of the flag. The soldiers were required to be in their quarters when retreat was sounded, and the day ended with taps. The above routine was interrupted for special inspections, dress and undress parades, and other periodic ceremonies. Troops were regularly sent from the post for scouts and campaigns against native tribes and civilians who stole or destroyed government property, or attacked settlements.

The task of building forts was often given to the soldiers themselves. Stationed at Fort Ewell, Texas, in 1852, a member of the Mounted Rifle Regiment wrote, "At present we are engaged in erecting the post, and the buildings in general are to be made of burnt brick (called doby) and you see by that, that we have laid down the sabre and the bow and taken up the shovel and the hoe, and got to work in the mud, making dobys." These efforts to make adobe were not marked by singular success. In a post inspection conducted that year, Brevet Lieutenant Colonel W. G. Freeman commented, "The adobes used for the walls of these houses are too soft to bear a roof without bracing." Only one building, used as a quartermaster storehouse but planned for a barracks, had shingles and this too, drew its share of criticism. "The shingled building," wrote Freeman, "is sustained by props, and would tumble down without them."

The garrison at Fort Stanton, New Mexico Territory was likewise put to work building their own adobe post. An entry in a soldier's diary for August 13, 1855 commented, "The fort is now going up fast. Quarters are already built for eight officers, one company of men, a guardhouse, the commissary and quartermaster's store rooms, etc. Soldiers are all at work." The poor quality of construction was illustrated by the fact that five weeks after the guardhouse was completed, two

The Confederate "Stars and Bars" flag was flying over Fort Lancaster, Texas, when this *Harper's Weekly* engraving was published on March 23, 1861. Originally established in 1855, the post was the scene of a fight between the black 9th Cavalry and Comancheros in 1867. It was reactivated as a sub-post during the Kiowa-Comanche troubles of 1871. (Author's collection)





Soldiers and laborers involved in the construction of one of the wooden enlisted men's barracks buildings at Fort Huachuca, in Arizona, pose for the camera, c. 1882–83. (Fort Huachuca Museum collection: 1880.15.00.106)

prisoners casually dug through the wall and escaped. While constructing adobe quarters and a stone storehouse at Fort Lancaster, in Texas, during 1855, the troops lived in temporary accommodation called "hackadales," which consisted of portable frames covered with canvas.

Established seven miles northeast of Tuscon, Arizona Territory, in 1873, Fort Lowell was built from adobe by elements of the 5th Cavalry, commanded by Colonel Eugene A. Carr. Faced with blistering 120-degree heat and the need for constant patroling against Indians, Carr appealed to headquarters for funds "to relieve the soldiers to a great extent, from the labor of building." The appeal did no good, but by fall of that year the post began to take shape. When orders were next received to stop work on the barracks and build storehouses instead, Carr again remonstrated, "I thought that I had reason to suppose that I was ordered here to build the shelters for troops at this camp. It seems to me, nothing more is required by humanity and justice to the troops than to build first the Hospital and the Company Shelters." Priority was subsequently shifted back to the building of barracks, which the troops went on to complete themselves.

Working on the building of Fort Huachuca in 1885, Private William Jett, 4th Cavalry, commented, "I have not forgotten carrying the hod of mortar on my bony shoulder many a day up to the men who were laying the sun-dried adobe blocks in the erection of barracks."

The soldiers' wives made the most of the primitive conditions found in frontier forts. Lydia Spencer Lane, who accompanied her husband to Fort Fillmore, New Mexico Territory, in 1860, recorded, "Such a dreary looking place I have seldom seen. The stiff line of shabby adobe quarters on three sides of a bare parade ground suggested neither beauty nor comfort, and for once I felt discouraged when we went into the forlorn house we were to occupy. It was filthy, too, and the room we chose for a bedroom must have been used as a kitchen. The woodwork was rough and unpainted; the modern method of oiling pine was not known in Army quarters then."

Marion Russell, newly wed wife of Lieutenant Richard D. Russell, 1st New Mexico Volunteer Infantry, described life in stone-built quarters at Camp Nichols, Indian Territory, in 1865, as consisting of "two stone rooms, dirt floor

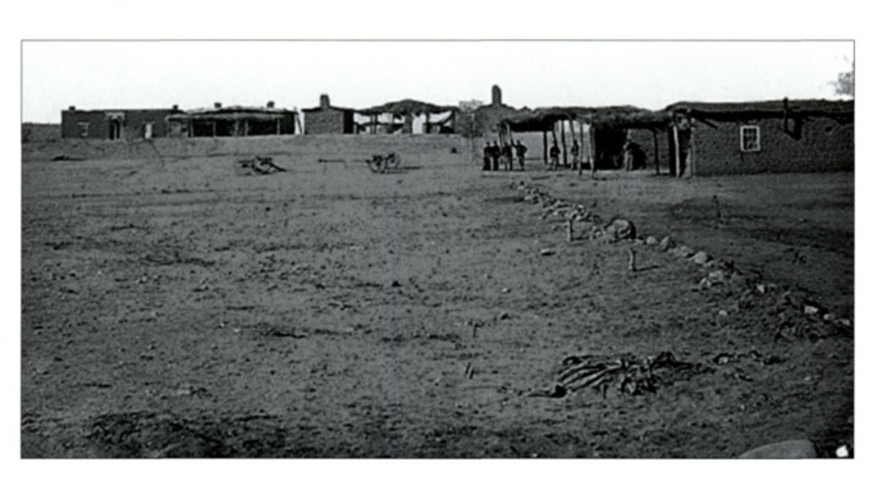
and roof, with blankets for doors, and white cloth over the window frame in place of glass. Our water was brought from the stream some 600 feet away, in buckets, and a soldier in our company was assigned us as cook." She explained that these buildings were outside the fort while "the soldiers, some 300 in number, slept in tents and dugouts within the enclosure."

Conditions were no better at Fort Cummings, New Mexico Territory. In 1867 post surgeon William Thornton Parker, MD, recalled: "

> *The "doby" buildings were low structures with flat roofs, built against the inner walls of the fort. There were no outside windows even in the hospital. All the windows looked upon the parade ground – there were of course no outside windows in the fort walls. The floors were of dirt. In some rooms army blankets were fastened down with wooden pegs for carpets. In one corner was a large open fire-place. The legs of the bedsteads were in good sized tins containing water to prevent large red ants from crawling upon the beds. Over head we nailed up rubber blankets, so that scorpions, centipedes, and tarantulas would slip off on to the floor, and be less likely to fall on the sleeper. Rattlesnakes got into our store rooms and into any open boxes, or among blankets and clothing.*

The living conditions of enlisted men were varied and usually much worse than those of officers. In many posts they slept four men to a bunk (two up and two down), in two-tier wooden bunks with wooden slat bottoms. The bed sacks were periodically filled with dried grass or straw. Rolled-up clothing might serve as pillows. Each soldier was issued two blankets, which he used in quarters and on field duty. Other furnishings in the barracks, including chairs, tables, and desks, were often fashioned from packing crates, boxes, barrels, and other available materials. The quarters were often lit by candles and heated by stoves.

According to a medical report published in 1875, the stone barracks at Fort McKavett, in Texas, contained beds with "a wooden chest, so made that the top projects over the head of the bunk, with a shelf over it. These chests have been found to be very convenient." The furniture in the log-built barracks at Camp Apache, Arizona Territory, was described as consisting of "a number of old-fashioned two-story bunks and a few benches and tables, all manufactured by the men out of rough lumber." The two spacious adobe barracks buildings at Fort Craig, New Mexico Territory, were in the form of a hollow square, each enclosing a *plazita* (small square). Each barracks contained two dormitories measuring 51ft by 20ft with ceilings almost 13ft high. In 1869 a surgeon condemned these as being "badly designed; the ventilation is defective; they cannot be heated; and should they happen to be crowded during an epidemic, the consequences would be serious." Besides dormitories, both buildings were complete with mess room, kitchen and rooms for laundresses and NCOs.



In 1872, General George Crook stated that Camp Grant, on the upper San Pedro River in Arizona Territory, was "recognized from the tide-waters of the Hudson to those of the Columbia as the most thoroughly God-forsaken post of all those supposed to be in the annual Congressional appropriations." Near this post occurred the Camp Grant Massacre of April 30, 1871. (US National Archives Photo 77-CA-1-150)

OPPOSITE **Barracks at Fort Union, New Mexico, 1875**
Fort Union was a four-company post, whose tin-roofed, single-story barracks were built from adobe on stone foundations. The four company quarters buildings built in 1867, one of which is shown here, each occupied three sides of a rectangle. Within each was a small courtyard or open space with a well in the center. The main buildings were each 73ft by 27ft, and were used as squad rooms and dormitories; in 1875 they were occupied by about 30 men per building. The wings on one side of each set were used as orderly and company storerooms, while those on the opposite side served as kitchens and dining rooms. These quarters were described as "really comfortable dwellings, although deficient in facilities for ventilation."

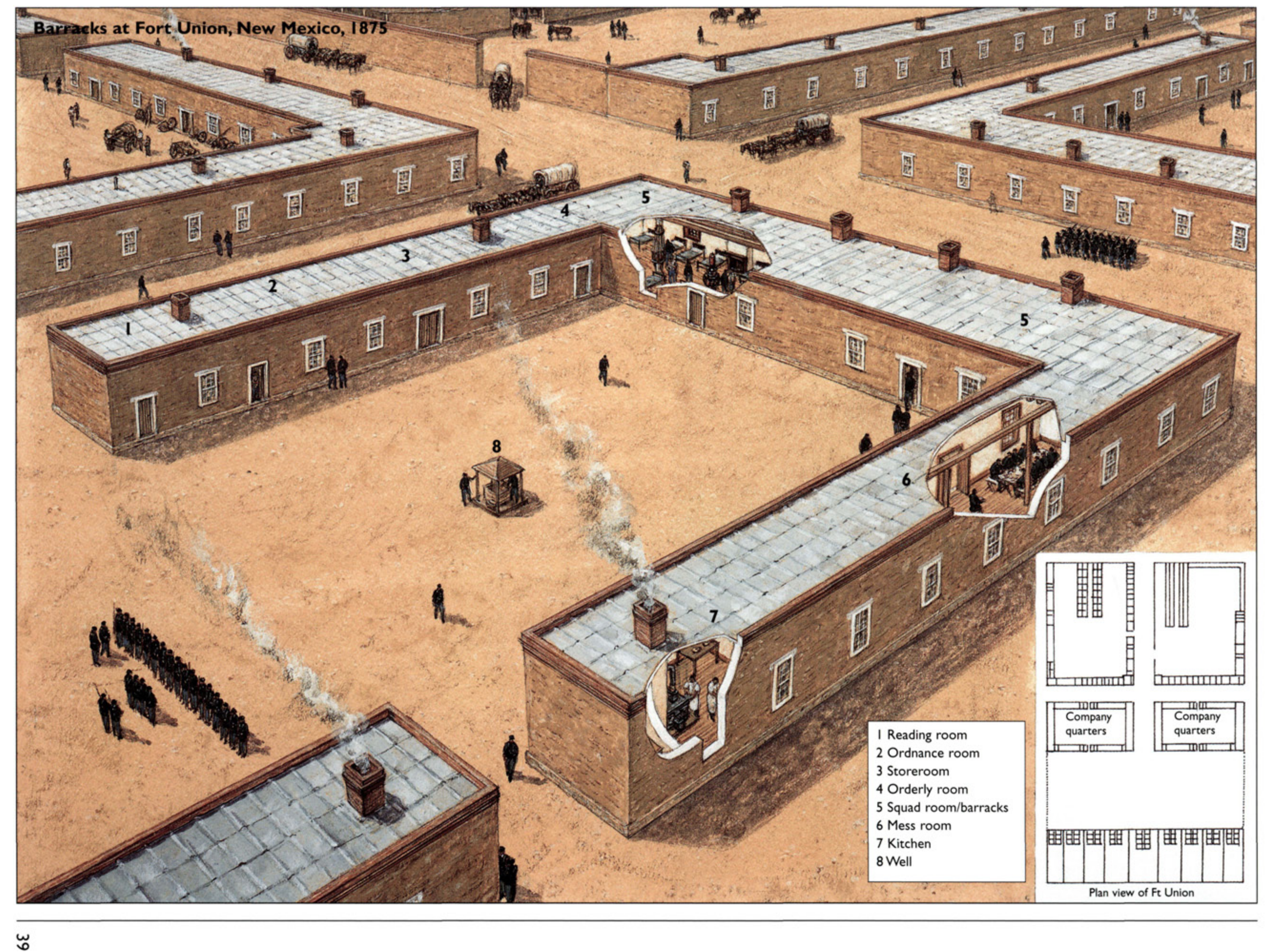
Unlike many crowded Western forts, iron bedsteads were used in the dormitories. During the day, these served as chairs and benches, "the men rolling up their bedding each morning to the head of the bunk, employing the foot of it as a seat." Porches ran across the front of both officers' and enlisted men's quarters.

Fort Bowie, in Arizona Territory, afforded enlisted men few of even the most basic comforts. Describing the fort in 1863, an officer wrote, "The quarters, if it is not an abuse of language to call them such, have been constructed without system, regard to health, defense or convenience. Those occupied by the men are mere hovels, mostly excavations in the side hill, damp, ill ventilated, and covered with decomposed granite taken from the excavation, through which the rain passes very much as it would through a sieve. By the removal of a few tents, the place would present more the appearance of a California rancheria than a military post."

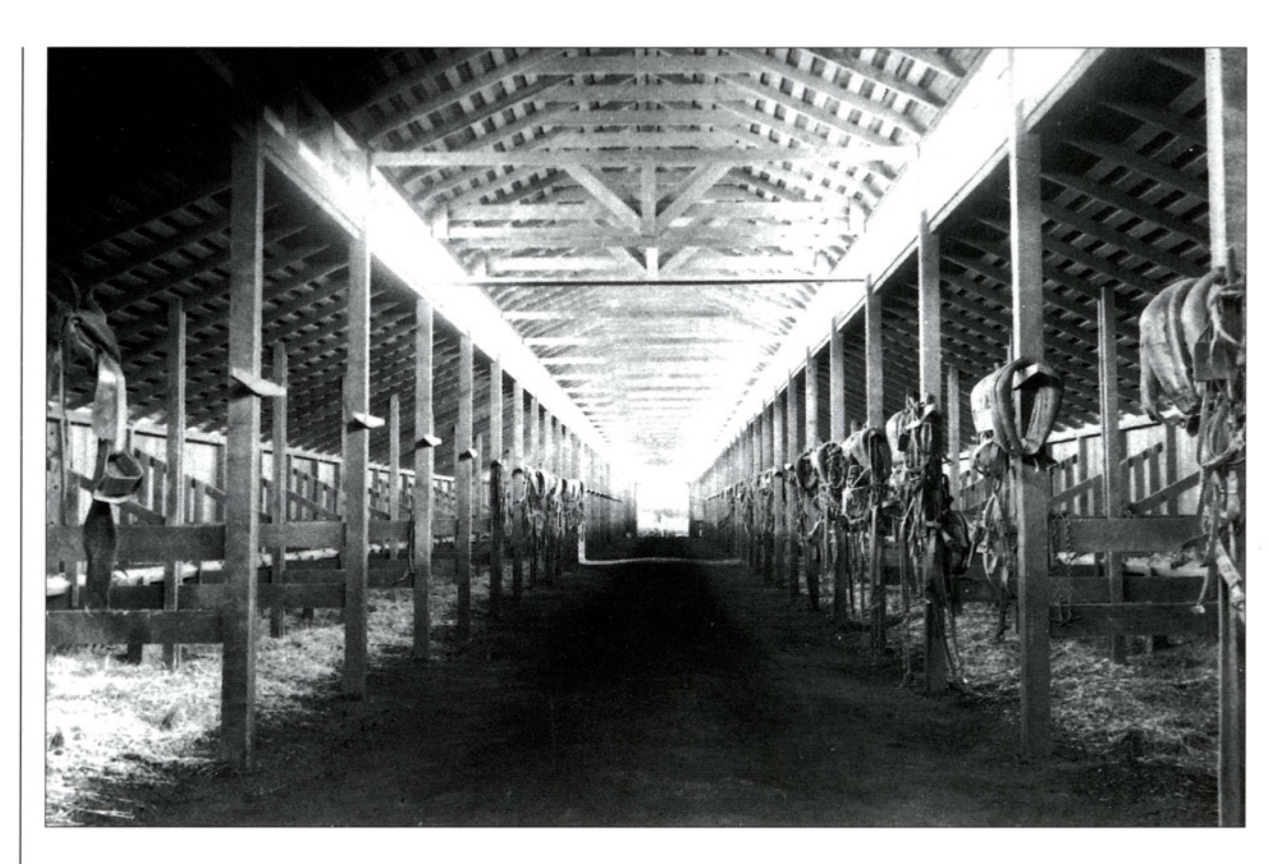
The harsh climate and seasonal temperature change in the Southwest caused garrisons extreme discomfort. In 1856 Mrs Lydia Lane, an officer's wife, wrote of her visit to Fort McIntosh, in Texas: "The heat is dreadful. The houses were mere shells, entirely exposed to the baking sun all day long. Not a green thing was to be seen but a few ragged mesquite-trees. Here and there a blade of grass attempted to grow in the scorching sandy soil, but it was soon burned up by the hot sun." After his inspection of that post during the same period, Inspector-General Mansfield was equally unenthusiastic, stating: "At the time of my inspection the thermometer stood at 99 degrees and it was extremely hot and dry and the troops as a body were exposed to the heat in their tents and out of them." He continued that the brush shades erected by some companies were "accomplished with difficulty, as the [wooden] posts had to be purchased out of the company fund which was exhausted with most of them and some companies had no shades at all."



This interior view of a wooden barracks building at Fort Huachuca shows comparative comfort with single beds and foot lockers of various sizes. Each man's accoutrements and items of uniform are suspended from shelves above their heads. Also note the gun racks, spittoons, and stoves either end of the room. (Fort Huachuca Museum collection: 1880.15.00.06)



Barracks at Fort Union, New Mexico, 1875



The interior of one of the four cavalry stables at Fort Huachuca, located at the northwest side of the parade ground, showing bridles and tack hanging up by the empty stalls. (Courtesy of Fort Huachuca Museum)

On March 9, 1872, the *Army & Navy Journal* reported that Fort Griffin, in Texas, had:

> *lately experienced some very strong gales of wind from the west, which, carrying along with them dense clouds of dust have, on account of the miserably constructed buildings used as quarters by both officers and men, filled every place to such an extent as to make it thoroughly disgusting, covered furniture, clothing, and even the very food, already prepared for eating, with dust, driven through the many holes and cracks with which the quarters abound. This winter, Griffin has been, without exception, one of the most disagreeable stations on the frontiers, from continued dense clouds of dust, which have filled the eyes, mouth, and ears of men and animals.*

The flat roofs at Fort Craig, in New Mexico Territory, led to extreme discomfort for the occupants during the rainy season. Following 57 consecutive hours of rain in 1868, an officer's wife complained: "The dirt roofs of the adobe quarters were leaking all over! Mrs. Porter was quite ill, and the water was pouring into the room where she was in bed under a tent-fly, with an umbrella over her head! Colonel Crittenden's quarters were in the same building, and the rain streamed through like a shower-bath … The rain ceased towards night and large fires were built; but the water still ran in from the roof."

The hardships of life at a frontier post increased with the arrival of winter. "The wind whistles loudly by us," Private Bennett, 1st Dragoons, wrote in his diary on the first day of 1853 at Cantonment Burgwin in northern New Mexico. "Snow beats against the windows … the mountain which overhangs us and towers almost to the skies is clothed in its garb of white snow and dark evergreen foliage. The drooping branches of these trees cast a sombre hue upon the rocky clefts upon which the trees are rooted. The long dismal howl of wolves is heard."

Disease and infection were always major concerns among the garrisons occupying frontier forts. Writing about an outbreak of dengue fever at Camp Wallen in 1866, Sergeant John Spring recalled:

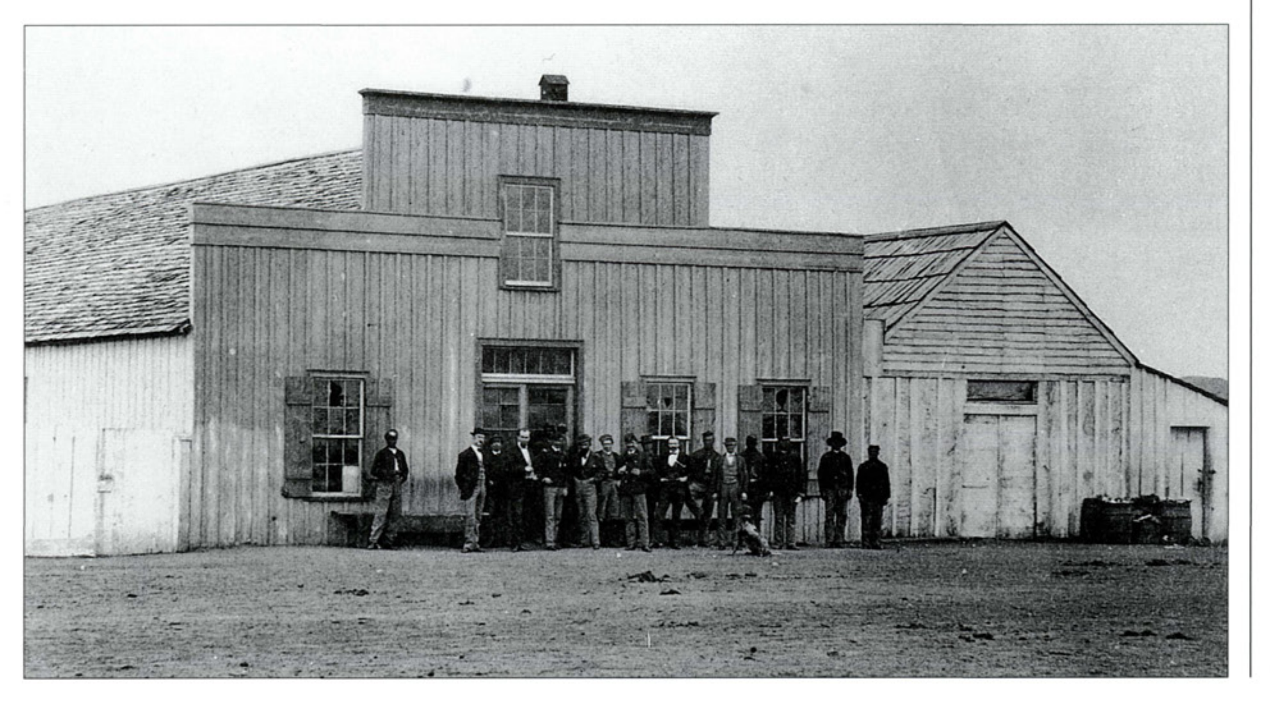
The hospital was, of course, built first. Although the general health of the garrison had been good so far, we experienced during that summer what appeared to be almost an epidemic, as many as fifteen men being seized in one day with chills that shook their whole frame, accompanied in some cases with vomiting and followed in every case by a burning fever and unquenchable thirst. These chills would occur every other day, and after a few days of the sickness the patient's bones would ache so that we called it the breakbone fever. The doctor, I believe, pronounced the disease to be intermittent malarial fever. In most cases it yielded after about one week to a treatment with strong doses of sulphate of quinine, leaving the patient somewhat weak for sometime longer, with a strong desire for something sour.

Inspecting conditions at Fort Ewell, Texas, in 1852, Lieutenant Colonel W. G. Freeman noted that although the garrison seemed healthy, the surgeon was convinced, from "the cases operating, that it cannot fail to prove a sickly station." There were 150 men at the post at the time and from "the want of vegetable diet the command has suffered from scurvy, of which thus far there have been 35 cases ... and there is at all times such a tendency to this disease as to make a constant supply of potatoes extremely desirable, as it is impossible to cultivate a garden, on account of the excessive heat, and the want of rain, dew, and even moist winds."

Infestation often caused extreme discomfort for frontier garrisons. Quarters made from rough-hewn logs afforded excellent hiding places for the annoying and disgusting *cimex lectularius* – the bedbug. During the hot summer months the garrison at Camp Apache, in Arizona Territory, preferred to sleep in the open air, so as to avoid the persecutions of the numberless bedbugs that infested their barracks.

The supply of water was a constant problem for garrisons occupying forts in the Southwest. An officer's wife who visited Fort Concho, in western Texas, in 1869, remarked: "It was built on the prairie and struck me as gloomy in the extreme.

Troopers of the 10th Cavalry, plus civilians, stand in front of the wooden frame-built Post Trader's Store at Fort Sill, Indian Territory, in 1876. (Courtesy US Army Artillery & Missile Center Museum, Fort Sill)



The water at the fort was bad and the heat in summer almost insupportable." A few posts were fortunate to have fresh water running down from mountain streams. The second Camp Grant, in Arizona Territory, had three such streams. An 1872 report stated, "One flows on the western side of the camp, and is contiguous. This stream is the principal water supply. It is damned at a convenient point above, and from the reservoir thus formed the water is drawn and distributed by water-wagons." Meanwhile, water had to be "wagoned in barrels" from the Rio Verde following the establishment of Camp McDowell, Arizona Territory, in 1865. An attempt was made to sink a well on the parade ground at that post, but no water was struck. In 1874 the garrison at Fort McKavett, in Texas, were reported to have "no lavatories or bath-rooms." The men washed "out of doors," and bathed in a nearby lake for nine months of the year.

W. T. Parker, the post surgeon at Fort Cummings, New Mexico, blamed a smallpox epidemic which wiped out about a quarter of the 40-man garrison in the late 1860s on the stagnant water supply at Cooke's Well, which was "impregnated with a large amount of organic matter, animal and vegetable, dead and alive, so as sometimes to become really obnoxious to health." He also blamed refuse piles, especially behind the post trader's building, and large pools of water in the vicinity that caused the ground to become marshy. In 1882, the post suffered a further major outbreak of typhoid. On this occasion, Parker noted that more than 50 men died and "some weeks there was a funeral every day." Once again, the epidemic was blamed on the spring water, and the surgeon tried to purify it with pinkish permanganate of potassium. He found everyone was as afraid of the fever as they were of the pinkish spring water, but, "There was nothing else to drink; and they had to choose between the typhoid, the poison, and the thirst."

Winter at Fort Davis, Texas with the two-story junior officers' quarters in the foreground and officers' row in the background. (US National Parks Service)



The forts at war

The Southwest, 1846–80

Fort Defiance, 1860

The Navajos had resisted white encroachment since 1846, when their lands were taken over by the US and named New Mexico Territory during the Mexican War of 1846–48. Established in 1851, Fort Defiance consisted of a number of pine log and adobe structures built around a parade ground. Authorized by Colonel Edwin V. Sumner, commanding the Ninth Military District, this post was located at Canyon Bonito, about seven miles north of Window Rock, and its purpose was to prevent the Navajo from raiding settlements up and down the Rio Grande River.

Several military campaigns had failed to subjugate the Navajos, and attempts were made in 1851 to arrange a peace treaty with them, but little agreement could be reached. At the root of the problem lay grazing rights, as Fort Defiance had been built on some of the best Navajo pasture land. Eventually, Chief Manuelito informed officials at the fort that his people would no longer permit the soldiers to graze their livestock on lands surrounding the post. He argued that the Indians needed the grass for their livestock, and pointed out that the military possessed many wagons in which to haul their provisions. Serving an "eviction" notice on the soldiers, the Navajos proceeded to graze their sheep and cattle closer to the fort. Commanding at the post, Major William T. H. Brooks ordered his men to chase the livestock off. When the Indians resisted, a skirmish erupted and the Navajo withdrew with their herds confiscated. The Army next rejected Navajo demands for payment for the cattle, and sporadic fighting continued for the next few years.

In August 1855, troops from Fort Defiance launched another major expedition against the Indians following the death of Major Brooks's colored servant in a scuffle with a Navajo at the post. Colonel Thomas "Little Lord" Fauntleroy targeted Manuelito's village for attack. Although the Army succeeded in surprising the village, the Navajo chief managed to escape. The military continued to campaign through December, but the results were minimal. Fifty Indians were purportedly slain, and another worthless treaty was arranged with the Navajos before the end of the year.



Painted by Seth Eastman, who served in the Southwest with the 5th Infantry, Fort Defiance, in Canyon Bonito, New Mexico (later Arizona Territory), consisted of a mixture of adobe and pine log buildings facing on to a large parade ground. In 1860 over 1,000 Navajo Indians descended on this post, which was ably defended by three companies of the 3rd Infantry, commanded by Captain O. L. Shepherd. (US National Archives)

Manuelito, chief of the Navajo



Born in 1818, Navajo chief Manuelito, meaning "Little Manuel" in Spanish, was known by his war name Haskeh Naabah, or "The Angry Warrior," to the Navajo people. He led the attack on Fort Defiance in 1860, and subsequently used guerrilla tactics to evade the forces under Colonel Edward R. S. Canby. During the campaign to defeat the Navajo ordered by General James Henry Carleton in 1863, Manuelito and his band continued to avoid capture. When ordered by Carleton to surrender for the sake of his starving people in February 1865, he refused stating, "I have nothing to lose but my life, and they can come and take that whenever they please … If I am killed innocent blood will be shed." Finally, in September 1866, he and 23 of his remaining followers laid down their arms and surrendered. After much suffering resulting from their removal to the Bosque Redondo Reservation, the Navajo people were granted a treaty on June 1, 1868, which permitted them to return to their homeland adjacent to Fort Defiance. From 1870 through 1884, Manuelito served as head chief of the Navajos. In 1872, he was also elected head of the Indian police force, and after retirement in 1885 continued to be a strong force among the Navajos. When he died in 1894 at the age of 75, he was one of the most respected people in Navajo history. The painting is by Elbridge Ayer Burbank, c. 1908 (US National Park Service).

Finally, on April 30, 1860, war whoops shattered the cool morning peace at Fort Defiance when over 1,000 Navajo warriors led by chiefs Manuelito and Barboncito descended on the hated fort, making it one of the few recorded incidents in the history of the Indian Wars in which Indians launched a large-scale attack on a fort. The strike nearly succeeded in overrunning the garrison, consisting of companies B, C, and E, 3rd Infantry, under Captain O. L. Shepherd, before being repulsed. One private, Sylvester Johnson, was killed and three other soldiers were wounded. No less than 20 Navajos were killed. A tombstone in the old Fort Defiance post cemetery marks the grave of Private Johnson today.

Fort Fauntleroy, 1861

The onset of the Civil War in 1861 caused the Army to withdraw its garrison from Fort Defiance with orders to march to Fort Fauntleroy (later renamed Fort Lyon), which stood approximately 50 miles to the southeast. Authorized on August 31, 1860, Fort Fauntleroy was near Bear Springs, a popular stopover and gathering place for the Navajos. This post was garrisoned by companies A, B, and C of the 2nd Regiment, New Mexico Volunteers, commanded by Colonel Manuel Chavez. On ration day, September 22, 1861, the Navajos assembled at the fort to receive their monthly food allotments, an inducement employed by the federal government to keep them from going on the warpath. As customary practice, a series of horse races between the Indians and soldiers developed. The seemingly harmless competition became the catalyst for tragedy. In the final race, the Navajo rider lost the contest but immediately lodged a protest that his white opponent had committed foul play by cutting his reins. Since wagers were heavy, the unsympathetic soldiers declined a re-run, foul play or not. In response, the angry Navajos attempted to storm the fort. A nervous sentry fired on an Indian at point-blank range. To complete the mêlée, the soldiers wheeled out a howitzer and shelled the Navajos at close range. When the dust cleared 12 Indians lay dead or dying, and another 40 suffered from various wounds. The casualties included a Navajo woman and her two small children.

In 1863 General James H. Carleton, commanding the Department of New Mexico, was influenced by reports that gold had been found in the area, and ordered the Navajos, plus the Mescalero Apaches, removed from their land and placed on a reservation. Known as "The Long Walk," this operation was executed by Colonel Christopher "Kit" Carson. Re-occupying the buildings at Fort Defiance (renamed Fort Canby) with a force consisting of New Mexico Volunteers and irregulars, plus some Ute and Apache scouts, Carson conducted a "scorched earth" policy designed to starve the Navajos off their homeland. Indian menfolk were killed on sight, hogans and crops were burned, and livestock and ponies shot. The starving Navajos surrendered and were imprisoned in a compound at Fort Defiance/Canby. In April 1864 about 8,000 Navajos and 400 Mescalero Apaches were marched at bayonet point through snow to Fort Sumner, which had been established in 1862 on the site of a former trading post called the Bosque Redondo, or Round Grove of Trees, in the Pecos River Valley. By the end of 1864, some 9,000 Native Americans were held captive at Fort Sumner and the surrounding 40-square-mile Bosque Redondo Reservation. Conditions were awful, and many people died. Most of the Mescalero Apaches escaped from the reservation on November 3, 1865, but, for the Navajos, another three years passed before the US government acknowledged Navajo sovereignty in the Treaty of 1868, and allowed them to return to their homeland.

Forts Cummings and Bayard, 1864–67

Fort Cummings, in New Mexico, was the rendezvous for a 90-trooper expedition in April 1864 that sent detachments from nine New Mexico posts into Apache land. The soldiers, with their civilian guides and teamsters, were ordered to "scour over the country to the southward" with orders that "all Apache men

large enough to bear arms who may be encountered in Arizona will be slain wherever met, unless they give themselves up as prisoners." No women or children were to be harmed but were to be taken prisoner. This action did not deter the Apache warrior from making regular nighttime appearances inside the walls of the fort. According to Surgeon W. T. Parker:

Some mornings we could find the Indian's moccasin tracks upon the parade ground, they having scaled the wall and crossed the parade and scaled the opposite wall without being observed. They did this by attaching a long hair lariat to a heavy stone. They would throw this over the wall and by a see-saw motion it would cut into the "doby" bricks. When it held fast, the Indians would by this assistance be enabled to climb the walls. They emerged in the same manner.

Fort Bayard received a similar taste of Apache hospitality within a year of its establishment as an open fort in western New Mexico in 1867. According to Surgeon Parker, it consisted of "the usual collection of buildings typical of a so-called frontier fort, but no wall or stockade. In the center was the usual parade ground with the staff of Old Glory, and a brass Napoleon six pound gun, on each side of it, pointing towards the main entrance." Under armed escort and delivering a packet of official papers from Fort Cummings to the post, Parker recorded:

It had happened that only a few days previously, early in the morning, before guard mount, a considerable body of Apaches, in war paint, dashed into the post firing right and left, at everyone in sight, and even at the doors of the buildings as they passed, and then, wheeling, yelling and firing, had ridden away. They were well mounted, and although the gun squad had rushed to load the cannon, before the gun strings could be placed for firing, they were out of range, as their defiant yell died away in the distance.

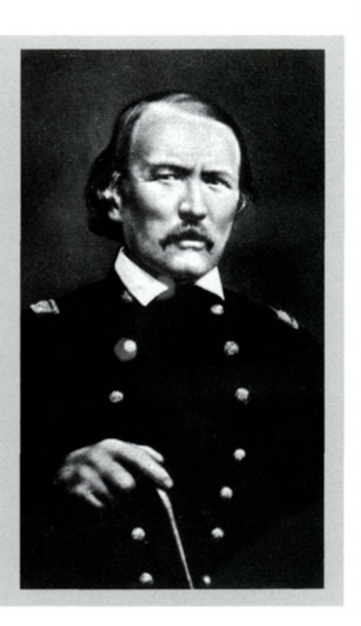
The Southern Plains, 1864–75

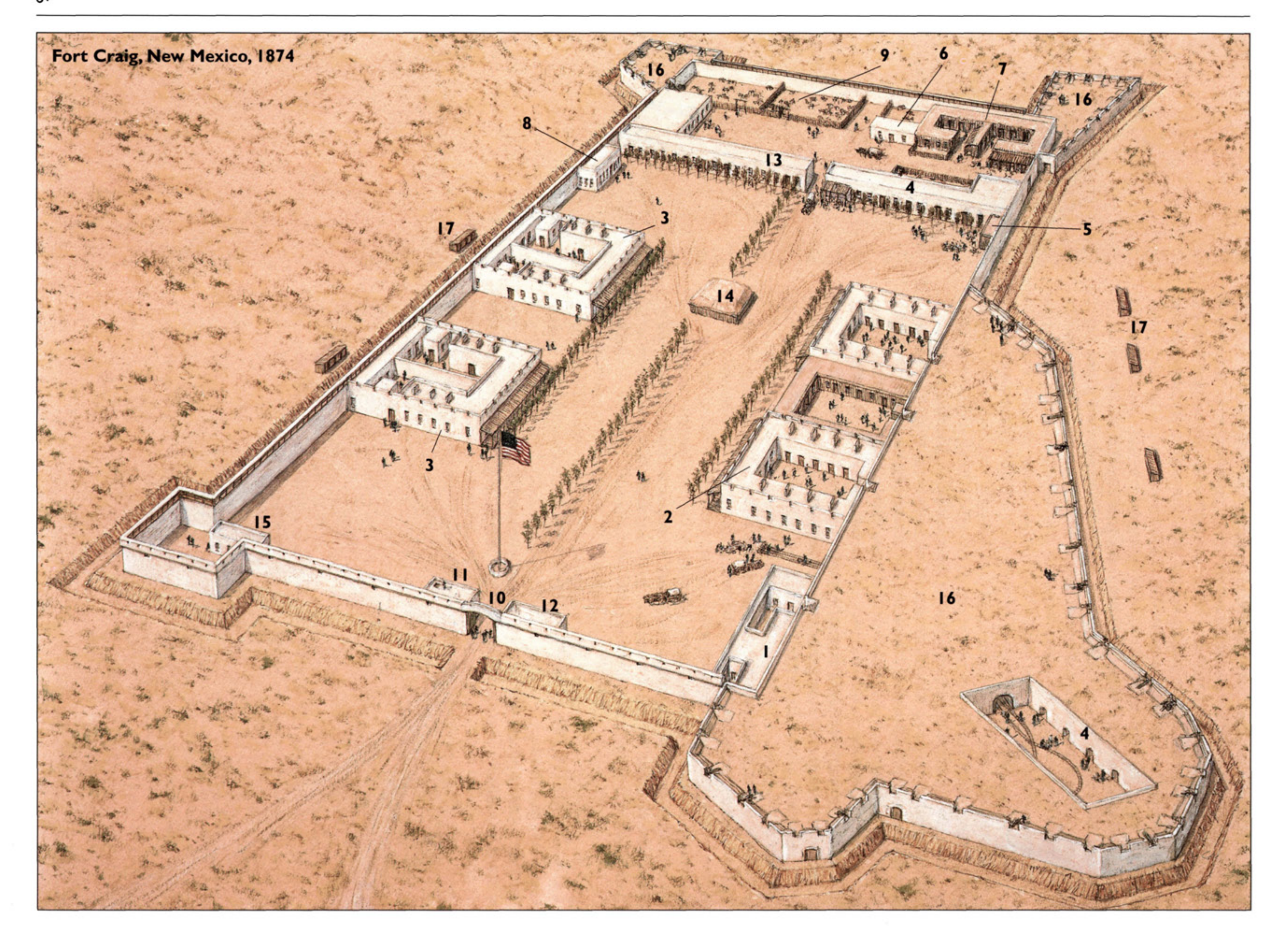
Adobe Walls, 1864

The First Battle of Adobe Walls occurred on November 26, 1864, in the vicinity of the ruins of Bent's abandoned Fort Adobe, built c. 1846. This encounter was

Christopher "Kit" Carson

Born in Missouri in 1809, Christopher "Kit" Carson worked as an apprentice saddle-maker until he was 14, when he ran away from home and headed west to Santa Fe, New Mexico. Taking part in numerous fur-trapping expeditions between 1828 and 1831, he was subsequently employed by William Bent as a hunter at Bent's Fort. He often hunted and lived with Native Americans, and became well known for his self-restraint and temperate lifestyle. According to one acquaintance, he was "clean as a hound's tooth," and a man whose word was "as sure as the sun coming up." In 1842 he met Lieutenant John C. Fremont, of the Army Corps of Topographical Engineers, and was hired as his guide for expeditions into Oregon and California. His service with Fremont, celebrated in that officer's widely read reports, made "Kit" Carson a national hero, and he was presented in popular fiction as a rugged mountain man. Carson next scouted with great success for General Stephen W. Kearney's expedition to California during the Mexican–American War. Returning to New Mexico in 1853, he was appointed federal Indian agent for Northern New Mexico, a post he held until the Civil War imposed new duties on him in 1861. Helping to organize the New Mexico volunteer infantry, he saw action at Valverde in 1862, and next took field command of the Indian campaign that led to the forced migration of 8,000 Navajo to the Bosque Redondo Reservation. In 1864 he commanded the forces in the First Battle of Adobe Walls and after the Civil War moved to Colorado in the hope of expanding his ranching business. He died at Fort Lyon in 1868, and the following year his remains were moved to a small cemetery near his old home in Taos, New Mexico. (Photo courtesy of the Colorado Historical Society, F34080)





Fort Craig, New Mexico, 1874

OPPOSITE **Fort Craig, New Mexico, 1874**
One of the largest forts in the Southwest, Fort Craig, in New Mexico Territory, played a crucial role in both the Indian campaigns and the Civil War. The primary role of this post was to control Indian raiding and protect the central portion of the Camino Real. Established on June 6, 1852, it was constructed on 40 acres leased from the Armendariz land grant. Named for Lieutenant Colonel Louis T. Craig, 1st Dragoons, who was later killed by deserters in California, the new post was spacious by frontier standards. Extending 1,050ft east to west, and 600ft north to south, Fort Craig consisted of 22 buildings of adobe and stone construction ranged around four sides of a large parade ground. Major structures included (**1**) the commanding officer's quarters, (**2**) enlisted barracks, (**3**) officers' quarters, (**4**) storehouses, (**5**) trader's store, (**6**) workshops, (**7**) stables, (**8**) hospital, (**9**) corrals, (**10**) sally port, (**11**) guardhouse, (**12**) offices, (**13**) married soldiers' quarters, (**14**) magazine, (**15**) Adjutant's office, (**16**) bastions, and (**17**) sinks or latrines. An adobe wall enclosed the post, and a stone-built sally-port in the west wall provided the only entrance. Surrounding the fort outside the wall was a defensive ditch, a rare feature in this region. Fort Craig was designed for two companies, about 120 men, but it was often garrisoned by four. It frequently served as a central location for disbursement of supplies to other posts.

one of the largest between whites and Native Americans on the Southern Plains. Colonel "Kit" Carson, commanding the 1st New Mexico Cavalry, was ordered to lead an expedition against the winter campgrounds of the Comanches and Kiowas, who were believed to be on the south side of the Canadian River. On November 10 Carson arrived at Fort Bascom with 14 officers, 321 enlisted men, and 75 Ute and Jicarilla Apache scouts, plus some civilian volunteers. Two days later the column, which had been supplemented by two mountain howitzers mounted on prairie carriages, under the command of Lieutenant George H. Pettis, marched along the banks of the Canadian River into the Panhandle of Texas. After a delay caused by snowstorms the column set up camp for the night of November 25 at Mule Springs, 30 miles west of Adobe Walls. Carson's scouts reported the presence of a large group of Indians encamped in and around the adobe ruins and immediately ordered forward his cavalry plus the two howitzers, leaving elements of the infantry, under Lieutenant Colonel Francisco P. Abreu, to follow later with the supply train. After riding 15 miles Carson's mounted troops located an Indian encampment of about 150 lodges and attacked at dawn, routing the Kiowa band led by the aged Chief Dohäsan. However, many of the Kiowa warriors escaped and spread the alarm among Comanche camps nearby.

Pushing on to Fort Adobe, Carson's cavalry troopers occupied the ruins by about 10am and fortified themselves ready for a counterattack, which was launched by about 5,000 Native Americans – a force far bigger than Carson anticipated – who were encamped close by. Sporadic attacks and counterattacks continued during the day, but the Indians were driven off by the howitzers, which had been strategically positioned on a small rise. Chief Dohäsan led several charges, and was ably assisted by Kiowa war chiefs Satanta and Stumbling Bear. Indeed, the former is reported to have sounded several mocking bugle calls back to Carson's cavalry buglers.

With ammunition and supplies running low by late afternoon, Carson ordered his troops to withdraw. Seeing this, the Indians tried to block his retreat by setting fire to the tall bottomland grass near the river, but the wily colonel set his own fires and withdrew to higher ground where his howitzers continued to hold off the attacking warriors. After torching the Indian lodges that had been attacked at the beginning of the day, Carson rejoined his infantry and supply wagons and ordered a general withdrawal back to Fort Bascom. In total, Carson's force, including Indian scouts, lost six killed and 25 wounded, three of whom later died. Indian casualties were estimated to be 100–150 killed or wounded.

Old Fort Lancaster, 1867

Conflict continued on the Southern Plains during the post-Civil War years when US authorities reneged on the Treaty of the Little Arkansas River of 1865, which had guaranteed the Cheyenne, Arapaho and Apache a huge reserve of land

comprising most of the western half of modern Oklahoma, all of the Texas Panhandle, and the remainder of the *Llano Estacado*, or Staked Plains, east of the Texas–New Mexico border. Persuading the Native Americans to sign a new Treaty of Medicine Lodge Creek in 1867 that reduced the reserve to only six per cent of its original size, all that remained for the Indian was a corner of the designated Indian Territory. Hence, a substantial portion of the bison range that would at least in theory have been off-limits to whites was laid open to the commercial slaughter that touched off the Red River War of 1874–75. This began the struggle that led to the final subjugation of the tribes of the Southern Plains.

Established in western Texas in 1855 to guard the San Antonio–El Paso Road and protect the movement of supplies and immigrants from Indian attack, Fort Lancaster was an active post for over five years but was abandoned March 19, 1861, after Texas seceded from the Union. On December 26, 1867, Company K, 9th Cavalry, under the command of Captain William Frohock, was encamped by the ruins of this fort when they were attacked by a combined force of Kickapoo, Lipans and Mexicans, plus some white American renegades, estimated at between 900 and 1,500 strong. However, the black troopers were saved from being overrun when their corralled horses stampeded through the lines of their assailants. "Had this stampede not occurred," recalled Captain Frohock, "it is doubtful if the defense against such overwhelming odds could have been successful." Once in possession of the Army horses, the hostiles withdrew and formed a mile-wide line of battle. Refusing to accept the loss, Frohock deployed the bulk of his company as skirmishers, leaving the remainder to protect the camp. "I advanced upon their lines," he recollected, "which receiving our fire, broke and reformed to the rear, several times; always, however, keeping the horses behind them and themselves beyond the reach of our shots." The troopers kept up the chase for about four miles before running out of ammunition and yielding to the dark. After a vicious three-hour fight, 20 Indians lay dead and two troopers who guarded the cavalry horses at Old Fort Lancaster were missing presumed dead, having been surprised, roped and dragged away.

Camp Supply, 1871

Established in northwestern Indian Territory on November 18, 1868, during General Philip H. Sheridan's winter campaign, Camp Supply was a base of operation for the 7th Cavalry under Lieutenant Colonel George Armstrong Custer. Nine days later Custer's command annihilated the Cheyenne encampment of Black Kettle in the valley of the Washita, which lay 70 miles to the south. According to the infantrymen who built it, Camp Supply was inappropriately named, for while there was "a partial supply of everything, there was not an adequate supply of anything." Tents and dugouts provided the first form of shelter as the workforce chopped and cut logs, and dragged them into position to form a defensible stockade. A log blockhouse and storehouse were also erected, plus several wells were dug.

On December 4, 1868, a reporter for the *New York Herald* observed that Camp Supply was of "sufficient strength to be defended by a small force against any number of warriors that may undertake to attack it. The north and west fronts consisted of a stockade; the east and south are made up of warehouses for stores. At the northeast and southwest angles are platforms sweeping all sides of the fort, and at the northwest and southeast angles are block houses with loopholes. From all points the rifles of the troops have a range of at least 800 yards."

During the spring of 1870, both the Cheyenne and the Kiowa in Indian Territory became increasingly active in attacking Army mail detachments and supply trains. Patrols were sent out frequently to rescue trains and civilian parties from attacks by marauding war parties. By June the danger that had been confined to the Fort Dodge/Camp Supply road spread further and Camp Supply itself was attacked by a party of Cheyenne and Kiowa warriors, who

boldly fired into the post. Individuals who wandered even a short distance from the protection of the buildings of the fort were likewise prone to ambush. Numerous attempts were also made to drive off Army livestock. In response several earthen redoubts, including Cimarron Redoubt and Deep Hole, were built along the Fort Dodge/Camp Supply road, and Camp Supply became a key base of operations that evolved into the Red River War of 1874–75, following the attack on Adobe Walls.

Adobe Walls, 1874

Commercial hunters began slaughtering buffalo for their skins during the winter of 1871/72 after tanneries had developed new methods for converting hitherto worthless dried buffalo skins into usable leather. Encouraged by this new market, hundreds of men flocked to the plains of southwestern Kansas to slaughter vast numbers of buffalo for their hides only. Once the Kansas herds had been decimated, they turned their attention to those remaining in the Texas Panhandle. Merchants followed the hunters and established a trading post among the ruins at Adobe Walls during the spring of 1874.

Incensed by the mass slaughter of the buffalo, which provided them with food, clothing and shelter, a combined force of Cheyenne, Kiowa and Comanche warriors led by Satanta and Quanah Parker, son of a captured white woman called Cynthia Ann Parker, attacked the trading settlement at Adobe Walls on June 27, 1874. Among the 28 people present at Adobe Walls at the time were buffalo hunters Bat Masterson, soon to be deputy marshal under Wyatt Earp, and Billy Dixon, a future army scout and Medal of Honor recipient. Also present was a youth named "Shorty" Bowman, Dixon's nephew, age 12. At approximately 4am on the night of the 27th the lodge pole supporting the dirt roof of the saloon collapsed with a loud crack, and the whole community immediately set about repairing the damage. Hence the inhabitants of Adobe Walls were awake when the dawn attack began. About 700 Indians had gathered along the tree-lined creek close by and were first spotted by Hanrahan employee Billy Ogg. Intent on getting an early start buffalo hunting, saloon owner Jim Hanrahan sent him to collect the horses picketed by the creek. As Ogg ran back to alert the others, Billy Dixon also saw the approaching Indians and fired a shot into the air. Dixon and Ogg managed to join seven other men who had sought refuge inside the saloon. The sod walls of this building, and the mud-covered "picket-pole" walls of others, proved impervious to Indian fire arrows. However, the close-quarter combat that ensued prevented the buffalo hunters from using their long guns effectively, but they were able to stave off the first onslaught with their revolvers. Once they had slaughtered all of the animals, leaving their victims helpless to escape, the Indians withdrew.

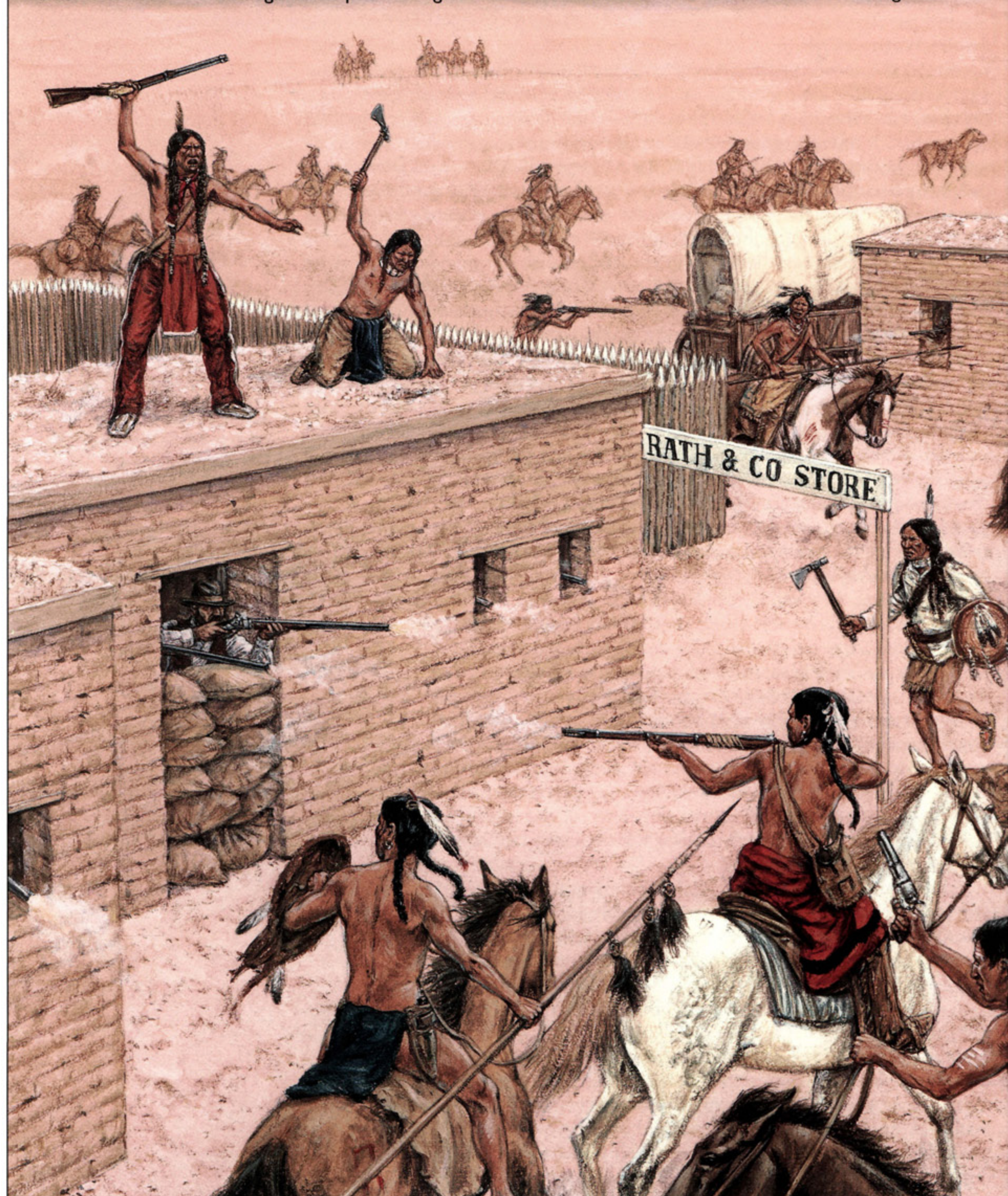
A lull in the fighting enabled those holding out in Hanrahan's saloon to send two men to Rath's store to replenish their depleted ammunition. Soon after, the attacks resumed but the Indians contented themselves with sporadic rifle fire from a distance as they settled down for a siege, which lasted four days. On the fourth day, a group of about 15 warriors ventured to the top of a distant ridge to plan another attack. Catching sight of them, Billy Dixon asked Bat Masterson to hand him his Sharps carbine. Taking careful aim, he squeezed the trigger and watched an Indian fall from his saddle, having been hit in the arm. Discouraged by such accurate marksmanship, the Indians withdrew and the siege was over. Two weeks later, a team of US Army surveyors established that the distance of Dixon's famed shot was 1,538 yards, or nine-tenths of a mile.



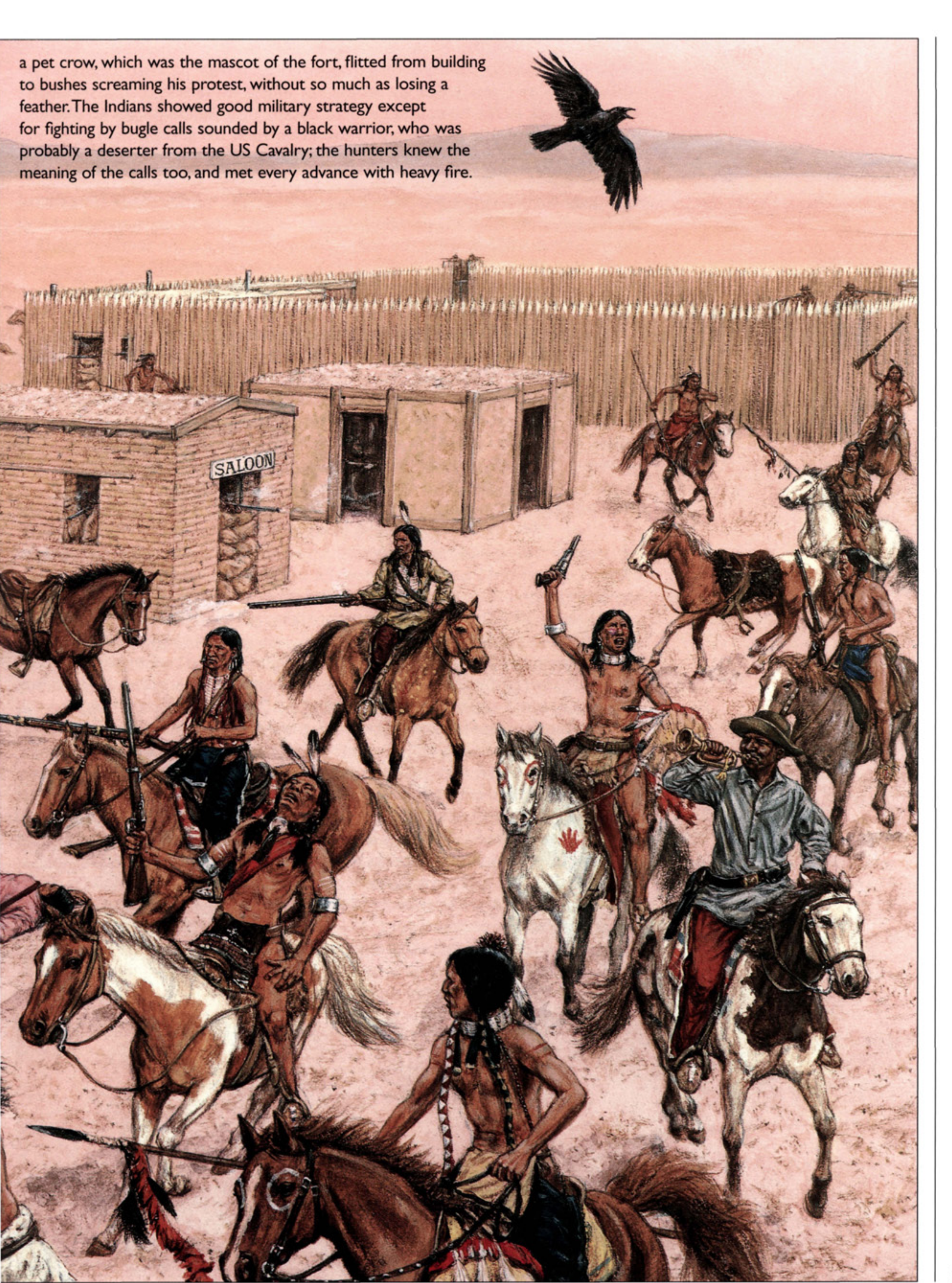
Quanah Parker, a Kwahadi Comanche chief, led the Native American attack on the trading posts at Adobe Walls in 1874. (US National Archives NWDNS-111-SC-87722)

The Battle of Adobe Walls in the Texas Panhandle, June 27, 1874

By the end of spring 1874, some 200–300 buffalo hunters roamed the area around Adobe Walls, and trade at the post was booming. On June 27, Comanche Chief Quanah Parker led some 300 Indians against the post. Among the buildings there were Myer and Leonard's trading post, Tom O'Keefe's blacksmith shop, James N. Hanrahan and Charles Rath's saloon, and the Rath & Co. Store. The doors of all these buildings were fitted with reinforcing cross-planks that proved resistant to the attempts of Quanah Parker and other warriors to break them down. During the attack



a pet crow, which was the mascot of the fort, flitted from building to bushes screaming his protest, without so much as losing a feather. The Indians showed good military strategy except for fighting by bugle calls sounded by a black warrior, who was probably a deserter from the US Cavalry; the hunters knew the meaning of the calls too, and met every advance with heavy fire.



The defenders of Adobe Walls suffered only four casualties. During the initial assault, the Sheidler brothers were scalped as they slept in their freight wagon while Billy Tyler was killed by an enemy bullet while taking aim through a stockade crack in the Myer and Leonard trading post. William Olds accidentally met his death on the fourth day of the siege when his gun misfired as he was leaving a lookout atop the saloon. The remains of 15 Indians were found too close to the buildings for the Indians to have retrieved their bodies. During the next year the US Army pursued Quanah Parker and his Quahada Comanches relentlessly until they were exhausted and starving. Their final surrender at Fort Sill on June 2, 1875 marked the end of Indian warfare on the Southern Plains.

The Southwest, 1880–81

Old Fort Tulerosa, 1880

The Eastern Chiricahua Apaches, often referred to as the Warm Springs or Mimbreño Apaches, wished to remain at Ojo Caliente on the fringes of the Black Range in New Mexico Territory, which was their ancestral home. In 1869 these Indians settled near Fort Craig, on the understanding that a reservation would be built for them at Ojo Caliente. Following their removal to the San Carlos Reservation in Arizona in 1877, they went on the warpath. Led by Victorio, a much feared war chief, they engaged the US and Mexican armies in a series of frustrating "hit-and-run" campaigns until their final defeat and surrender in Mexico during October 1880.

By May 1880 the renegades were being pursued by elements of the 9th and 10th Cavalry, the two African-American cavalry regiments in the US Army. On the 13th of that month, a detachment of 25 troopers of Company K, 9th Cavalry, under Sergeant George Jordan, were under orders to escort a supply train to Old Fort Tulerosa to set up a supply base for their regiment. The site of an Apache Indian Agency from 1872 through 1874, this abandoned fort was occupied by a small community of white squatters by this time. While bedding down for an overnight stop at the Barlow and Sanderson Stage Station, Sergeant Jordan's tiny command received news that Victorio and his band were approaching the Old Fort. On foot, as their horses had been worn out and not replaced, Jordan and his detachment marched through the night, arriving at their destination at dawn the next day to find that Victorio had not yet struck. Jordan set his men to work to repair and strengthen the remains of the old post, which once consisted of several officers' quarters built of adobe, and a series of temporary shelters constructed of logs with earthen roofs. The white settlers were gathered together in several of the larger buildings, while the troopers threw up barricades as best they could.

More than 100 Apaches attacked at dusk on May 14, but the "buffalo soldiers" held their ground and drove the hostiles off. During this attack Jordan dispatched ten of his troopers to prevent the Apaches from capturing the mules and cattle. He later recalled, "Keeping under cover of the timber, the men quickly made their way to the herders and drove the Indians away, thus saving the men and stock ... After it was all over the townspeople congratulated us for having repulsed ... more



Apache scouts drilling with Springfield carbines at Fort Wingate, New Mexico Territory. In 1874 the Apache-Tonto scouts stationed at the Rio Verde Indian Reservation with elements of the 5th Cavalry initially lived in shelter tents about 200 yards away from the main post. Unhappy with this, they soon moved into "brush-shelters" or those of their own making. (US National Archives NWDNS-111-SC-87797)

than 100 redskins." Victorio subsequently abandoned his attack and moved south into Mexico, where he was finally killed by Mexican government troops. In 1890 Sergeant Jordan received a Medal of Honor for the courage and leadership displayed at Old Fort Tulerosa.

Fort Apache, 1881

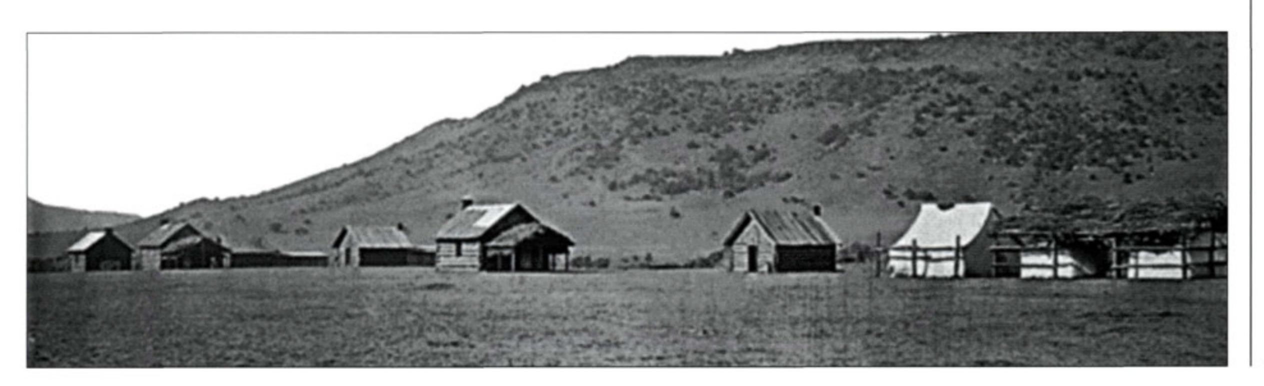
Strategically located on the northern edge of the San Carlos Reservation in Arizona Territory, Camp Apache was the key post during Crook's campaign against the Apache during 1872–73. Following the removal of the Chiricahua to the San Carlos Reservation in 1876, a number of other renegade bands under leaders such as Geronimo, Natchez and Chato also escaped from the reservation and were pursued, generally without success, by soldiers from Camp Apache and other posts.

Serious trouble flared up at Fort Apache, as the post was known by 1881, when the White Mountain Apaches began to perform the Ghost Dance, which they believed would bring dead warriors back to life. Inspired by a medicine man called Nakaidoklini, some of the Indian scouts at the fort were also reported to have taken part in Ghost Dances. Fearing a general Indian uprising, Colonel Eugene Carr, 6th Cavalry, commanding Fort Apache, received orders on August 15 to arrest Nakaidoklini. On the same day Apaches gathering ominously around the fort cut the telegraph line to Camp Thomas, some 90 miles away, while seasonal heavy rains and flooding hit the area, preventing the possibility of reinforcements coming to the aid of the beleaguered post.

Realizing his command was cut off, Colonel Carr nonetheless dispatched couriers to Camp Thomas for reinforcements, and prepared Fort Apache for attack. Gaps between the innermost buildings were filled with breastworks made from logs, boxes and wagons, while loopholes were cut into walls of the quarters and barracks. On August 29 Carr set out with troops D and E, 6th Cavalry, plus a company of Indian scouts, (amounting to 111 men) to capture Nakaidoklini, who was at an Indian village on Cibecue Creek, about 45 miles northwest of the post. Less than 70 soldiers, plus 45 civilians, remained at Fort Apache under the command of Major Melville Cochran, 12th Infantry. According to his official report Carr arrived at the Indian village on the 30th and arrested the "Medicine Man":

> *He professed his entire willingness to come with me, and said he would not try to escape and there would be no attempt at rescue, but as we were making camp our own scouts, and many other Indians [,] opened fire upon us and ran off the animals already turned out to graze. The Medicine Man was killed as soon as they commenced firing, and we drove them off after a severe fight in which we lost Capt. [Edmund C.] Hentig, who was shot in the back by our Indian scouts as he turned to get his gun. Four privates were killed and one sergeant and three privates wounded, two of them mortally. After burying the dead I returned as rapidly as practicable, arriving [back at Fort Apache] on the 31st.*

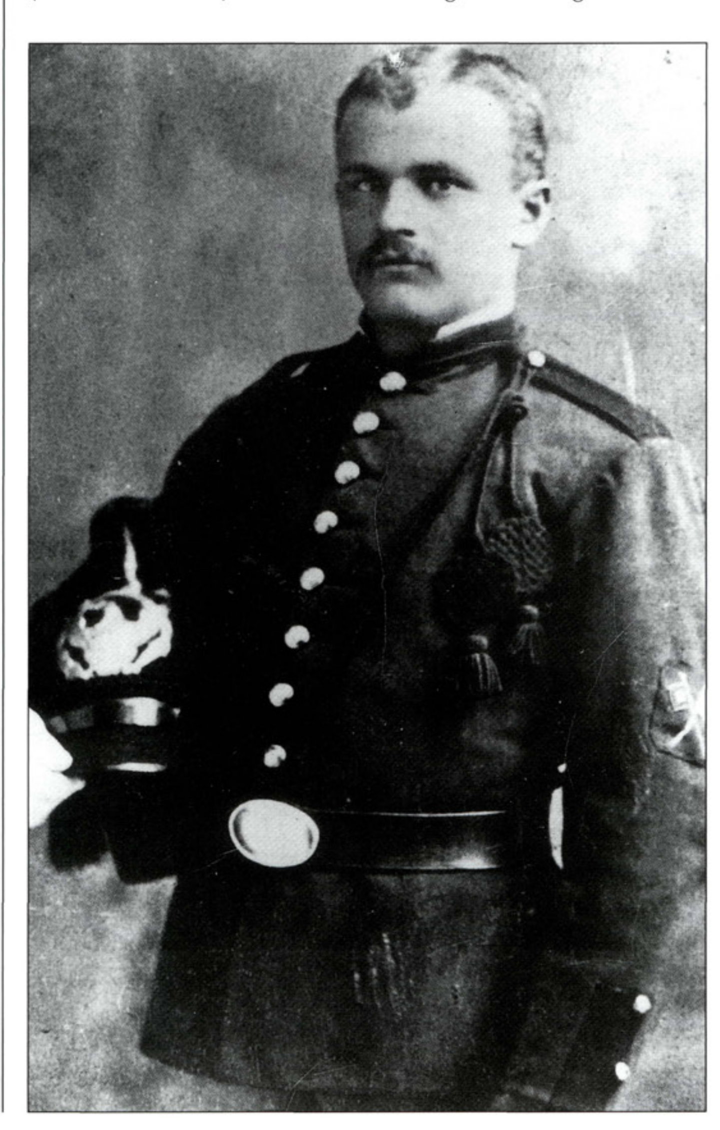
These officers' quarters at Camp Apache in Arizona Territory, c. 1871, consist of log cabins with tin roofs, and tents protected by wooden frames with sod-covered roofs. The tent third from the right awaits the addition of its roof. (US National Archives NWDNS-106-WB-98)



OPPOSITE **The attack on Fort Apache in Arizona Territory, September 1, 1881**
Fort Apache was cut off and beseiged by White Mountain Apaches from August 15 through September 10, 1881. The fort was defended by Colonel Eugene Carr, 6th Cavalry, who conducted an orderly defense during the attack, which took place on September 1. This illustration shows the Apache assault on the valuable sawmill on the eastern perimeter of the fort, during which Captain C. G. Gordon was wounded in the leg. This fort was unusual for having the soldiers' quarters standing in the middle of the main parade ground, which can be seen in the background.

Meanwhile, the garrison at the fort received word that Colonel Carr and his whole command had been massacred. Back east the *New York Times* of September 4, 1881, carried three columns of details that read remarkably like the Custer massacre of five years before. Certainly three men on detail at Seven Mile Hill, on the road to Camp Thomas, had been killed, which may have given rise to the rumours. In order to quell the fear of imminent Indian attack among those still manning the fort, Private Will C. Barnes of the Signal Corps volunteered to climb the 2,000ft height of a nearby *mesa* and use his signal flags to alert the post to Indian movements. On the second day he saw a cloud of dust off to the west, which turned out to be Carr's returning troopers, and he signalled the good news to the fort.

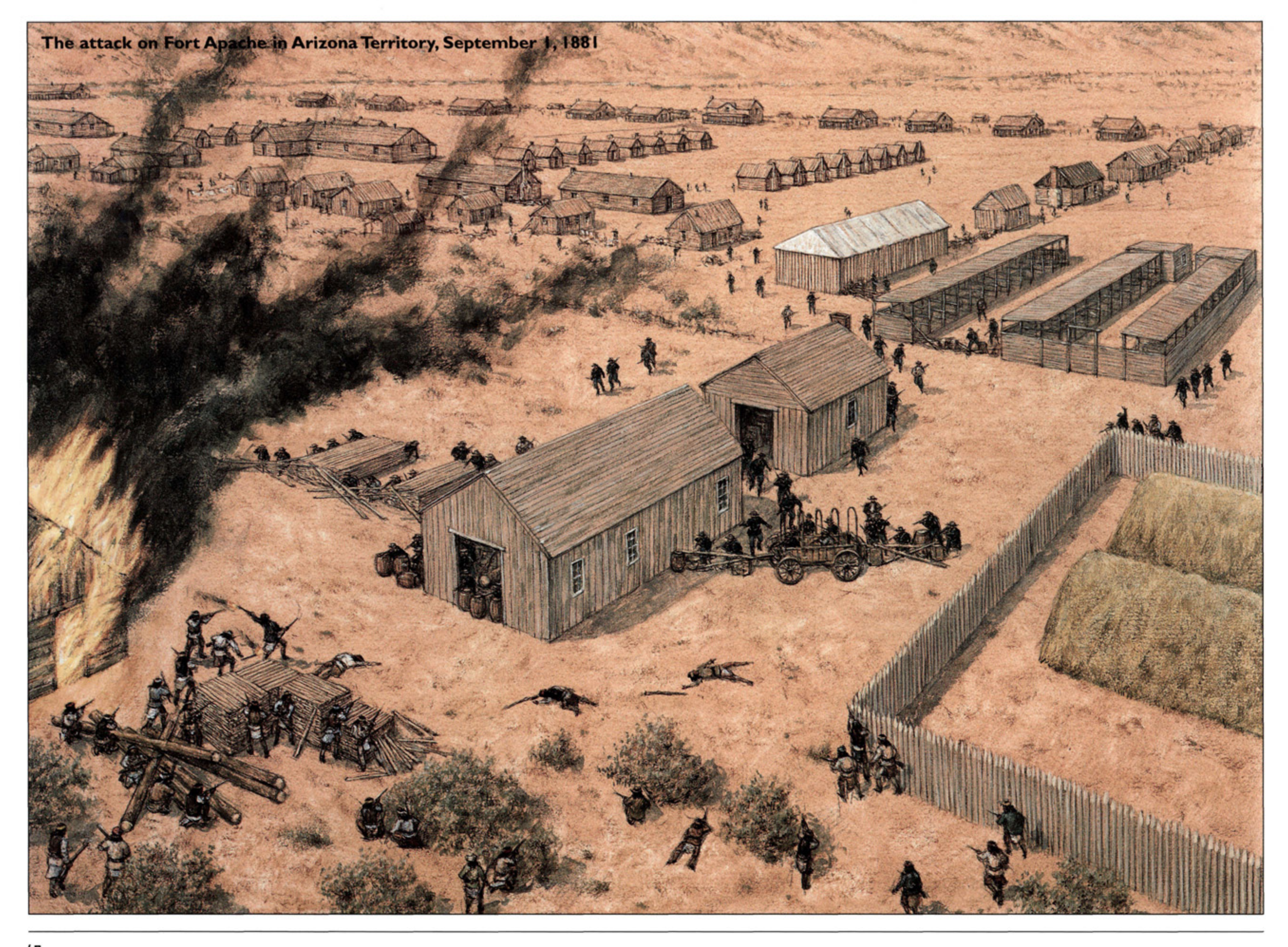
BELOW Private Will C. Barnes, US Signal Corps, had the dual responsibility of post telegrapher and weather observer at Fort Apache during the attack in 1881. He was awarded the Congressional Medal of Honor in 1883 for several acts of bravery on that occasion. (US National Archives)



On arrival back at Fort Apache, Carr made preparations for an attack that he thought was inevitable. His report briefly states, "Next morning they made demonstrations against this post and attacked it in the afternoon, but were repulsed."

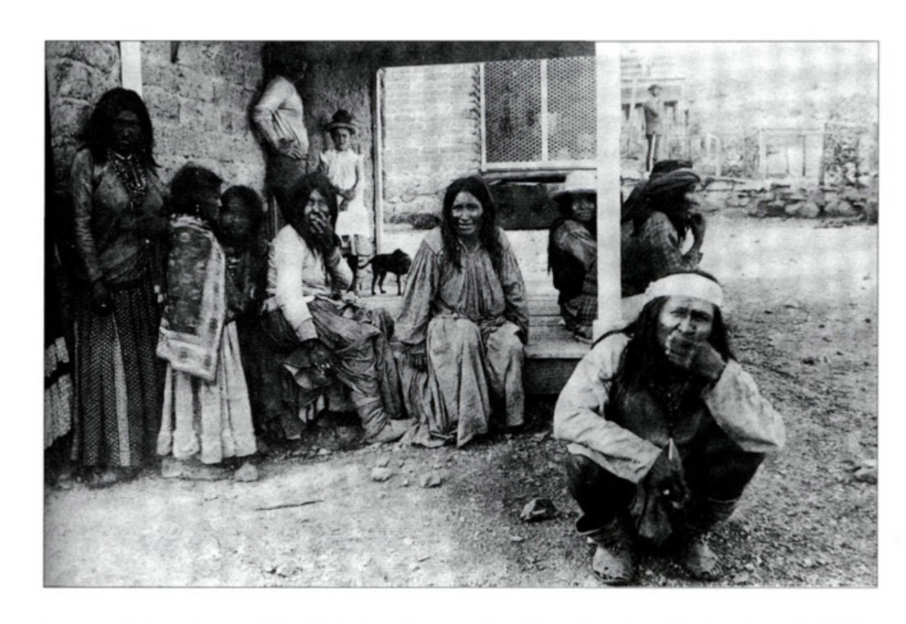
In fact, the hostiles first fired into a detail at the graveyard about a quarter of a mile from the fort trying to bury the remains of Private Frian, Troop D, 6th Cavalry, who had died of wounds received at Cibecue. Private Barnes and Sergeant John Smith kept them at bay and fought a rearguard action as their comrades retreated back to the comparative safety of the parade ground. The Indians next fired into the fort from the bluffs to the northeast and south, and the troopers formed a skirmish line around the entire post. Carr's horse was shot from under him, and soon the outlying buildings were set on fire. A party of soldiers and civilians was sent out to save the sawmill, about 400 yards away, from meeting the same fate. According to the report of Lieutenant W. Stanton, Troop E, 6th Cavalry: "The fight lasted until dark, when the Indians drew off. Capt. [C. G.] Gordon, successor to Capt. Hentig, was wounded in the leg. There were no other casualties. The firing during the first hour was very heavy from the hostiles. We believe we can keep them out of the post, but no more."

On September 2, Carr ordered Stanton to break out of the fort and lead his troop to Camp Thomas in order to fetch reinforcements. On the night of September 8/9, Private Barnes once again showed great courage by agreeing to ride out with an armed escort to repair the telegraph line that had



The attack on Fort Apache in Arizona Territory, September 1, 1881

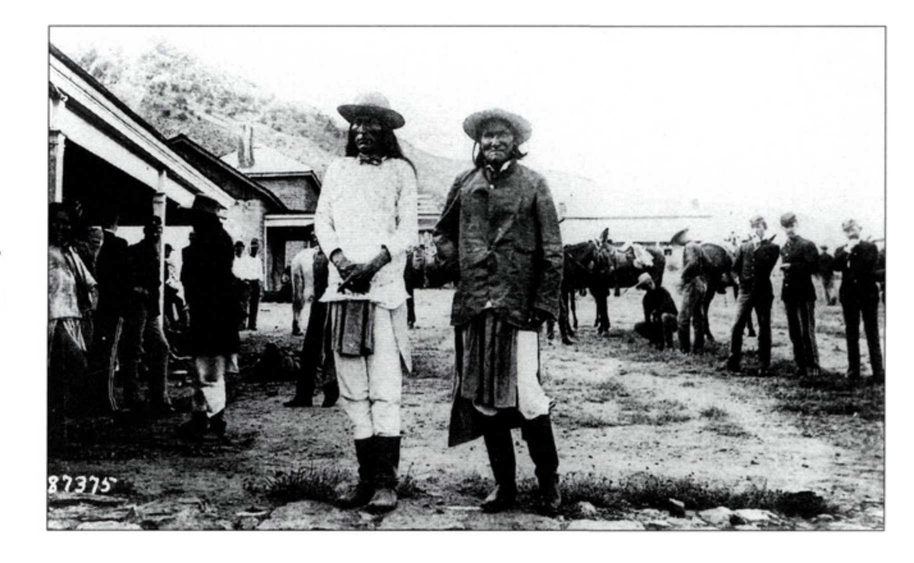
Apache prisoners rest outside the adjutant's office at Fort Bowie, Arizona Territory, after the surrender of Geronimo on September 4, 1886. The high-topped moccasins on the warrior squatting in the foreground are badly worn from the strenuous pursuit by the army. (US National Archives NWDNS-111-SC-87343)



been cut since August 15. Fort Apache was finally relieved on September 10, 1881, with the arrival of Troop F, 6th Cavalry. According to Private Anton Mazzanovich:

> *We arrived at the edge of the high bluffs overlooking Fort Apache. A veil of white smoke hung over the little valley below. Several fires were burning, and we could hear dogs barking, although but faintly. I was standing at the bluffs among some of the Indian Scouts and overheard one of them remark in Spanish to Cook, the chief packer: "All burned: Fort Apache – no more."*

However, Fort Apache was repaired and continued to play a vital role in the Indian wars until the surrender of Geronimo and the removal of the Chiricahuas in 1886. Meanwhile, other posts in the region were similarly reinforced, and columns marched out to hunt down the hostiles responsible for the uprising of 1881. Colonel Carr endorsed 12 officers and enlisted men for the Medal of Honor following the attack on Fort Apache, and singled out Private Barnes for his continued "good conduct and attention to duty." Barnes finally received his medal in a retreat ceremony on the parade ground at Fort Apache during the spring of 1883.



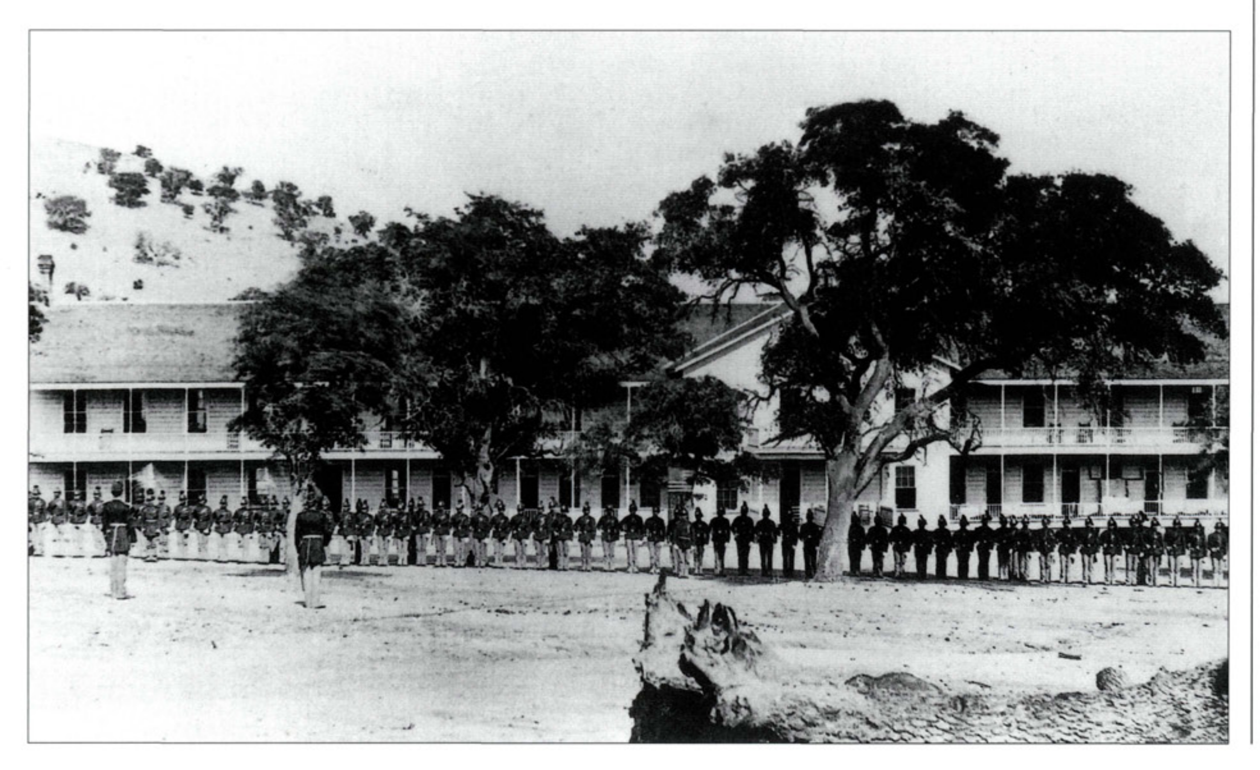
For more than 24 years Fort Bowie, in Arizona Territory, was the hub of military operations against renegade Chiricahua Apaches. After their surrender, Apache leaders Natchez and Geronimo, seen left to right, stand on the terraced parade ground outside a barracks building in 1886 awaiting transportation to exile in Florida. Members of the 4th Cavalry band watch curiously in the background. (US National Archives)

The fate of the forts

The US Army closed more than 50 forts and camps in Arizona Territory alone after the final surrender of Geronimo in 1886. A similar impact had already been felt on the Southern Plains and elsewhere in the Southwest. The end of the Indian Wars and the expansion of the railroad meant that far-flung military posts were no longer necessary to police the region. However, certain military installations were retained due to their strategic importance. Fort Huachuca continued to function as a base of operations in response to ongoing border troubles involving renegade Indians, Mexican revolutionaries and American outlaws. The post has been run by the US Army Information Systems Command since 1984. Fort Wingate, New Mexico, still functions today as an Army depot, and is occasionally used to fire missiles to the White Sands Missile Range. Also remaining active as an Army post in present-day Oklahoma, Fort Sill became the home of the "School of Fire for the Field Artillery" in 1911, and continues to operate today as the US Army Field Artillery School. Fort Apache was occupied by the Army until 1922 when the site became the home of the Bureau of Indian Affairs' "Theodore Roosevelt Indian Boarding School." Initially intended to accommodate Navajo children, by the 1930s a majority of students at the school were Apache. Today it continues to serve as a middle school under the administration of a school board selected by the Tribal Council. An Indian school also moved into Fort Wingate, New Mexico.

Fort Lyon, in Colorado, went from frontier fort to naval hospital in 1917. The Veterans Administration took over the facility and grounds in 1922 and it became a psychiatric care hospital and later a home to many elderly veterans who needed a nursing home environment. The hospital facility still operates

A full-dress parade in front of the wooden enlisted men's barracks at Fort Huachuca, Arizona, in 1884. (Fort Huachuca Museum collection: 1884.00.00.09)



today as part of the Colorado Prison System. In 1941 Fort Stanton, New Mexico, became the nation's first internment camp for Germans. Captain Wilhelm Daehne and 410 of his comrades were non-combatants from the scuttled cruise ship *Columbus* and entered the Fort Stanton camp as "distressed seamen" before the US entered the war.

Since the establishment of the National Park Service (NPS) in 1917, a number of fort sites in the Southwest and on the Southern Plains have become national monuments. The Army abandoned Fort Concho on June 20, 1889. However, most of its buildings escaped demolition by conversion into civilian housing and commercial storage space. In 1929 local activist Ginevra Wood Carson headed a fund-raising campaign to buy the former Fort Concho administration building. In 1930 she moved her already established museum into the newly acquired building and founded the Fort Concho Museum. The city of San Angelo took over the operation of the museum in 1935 and began a program of land acquisition and building restoration. By the mid-1950s the city had acquired several fort properties and rebuilt two barracks and two mess halls from ruins. In 1961 Fort Concho was registered as a National Historical Landmark through the Historic Preservation Office of the National Park Service. At about the same time the fort was placed on the National Register of Historic Places and designated a Texas Historic Landmark.

Closed as a military post in 1891, the adobe ruins of the third Fort Union were neglected for 63 years until the establishment of the Fort Union National Monument in 1956. Today this includes the earthworks of the second fort, plus an 80-acre detached section a mile to the west containing the remains of the first fort and arsenal.

Following the departure of the military from Fort Davis in 1891, civilians occupied the quarters and prevented the rapid deterioration that befell many abandoned frontier posts. The fort became a national historic site in 1963, and the NPS has conducted a continuing programme of restoration and preservation to this day. After the surrender of Geronimo in 1886, Fort Bowie was officially abandoned by the Army on October 17, 1894, and it too became a national historic site in 1964. This also includes the ruins of a Butterfield Overland Stage station, ruins of the Chiricahua Apache Indian Agency, and sites of the Wagon Train Massacre and Battle of Apache Pass.

State historical societies have also had their part to play. In Texas, the remains of Fort Leaton were acquired December 8, 1967, by deed from a private owner and were opened to the public as the Fort Leaton State Historic Site in 1978. Located in Kinney County, Texas, Fort Clark was finally deactivated by the Army in 1946, and is today preserved and run by the Fort Clark Historical Society. Under the auspices of the Colorado Historical Society (CHS), Bent's Old Fort was excavated by Dr Herbert Dick in the early 1950s. Low adobe walls have been constructed which outline the original foundations. At Fort Garland, the CHS also interprets a typical 19th-century frontier post. Although the original Fort Gibson, in Oklahoma, has long since disappeared, the State, under a Works Project Administration grant in 1936, reconstructed the log stockade and several outlying buildings almost to the original site and scale. The Fort Gibson Historic Site is today operated by the Oklahoma Historical Society.

Other forts on the Southern Plains and in the Southwest simply vanished without trace for a variety of reasons. Some, like Fort Inge in Texas, were dismantled and their timbers were used to build new forts. Site of the grave of William ("Billy the Kid") Bonney, the few remains of Fort Sumner, New Mexico, have been damaged by floodwaters from the Pecos River. Following the discovery of a trove of Spanish coins buried under the ruins of its walls in 1887, large numbers of Santa Fe citizens turned out and dug the whole country up in the vicinity of the redoubt called Fort Marcy, near Santa Fe, but without finding anything new. This frenzied treasure hunt destroyed the last of the standing walls.

The forts today

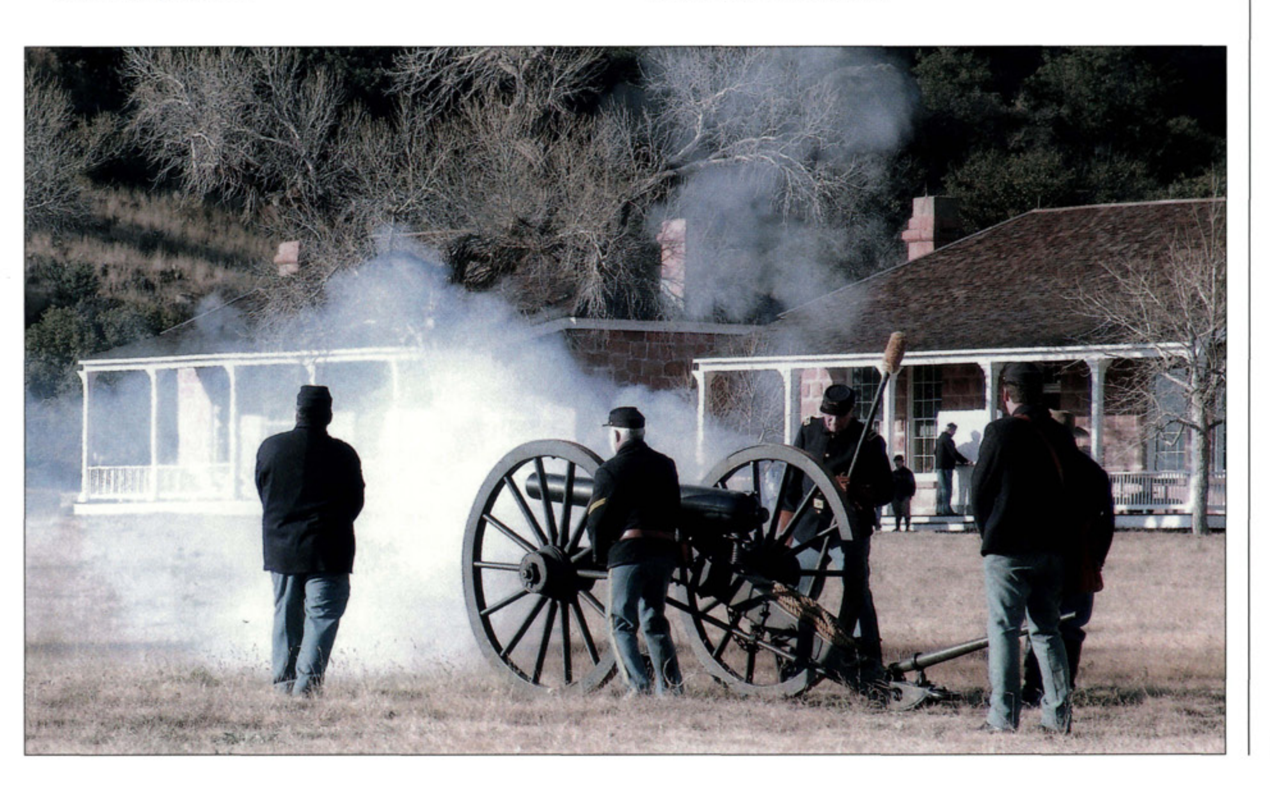
Although not exhaustive, this list includes the main frontier fort sites on the Southern Plains and in the Southwest owned by the National Park Service, government agencies, the local community, or those in private hands. At the time of writing, all of these sites are open to the public unless otherwise noted.

Adobe Walls (Fort Adobe)
Location: Hutchinson County, Texas.
Length of service: 1846–49.
Description: Adobe-walled trading post, the site of battles in 1864 and 1874. Nothing remains today although a marker stone stands on the six-acre site.
Owner: Panhandle-Plains Historical Society.
Relevant website:
www.panhandlenation.com/adobe_walls.htm

Bent's Old Fort
Location: La Junta, Colorado.
Length of service: 1833–49.
Description: Replica adobe-walled fort based on original plans and drawings.
Owner: National Park Service.
Relevant website:
www.nps.gov/beol/

Camp Verde
Location: Camp Verde, Texas.
Length of service: 1855–67.
Description: Open fort consisting of pisé-work and adobe. Remains of a few buildings survive.
Relevant website:
www.ghosttowns.com/states/tx/campverde.html

Camp Crittenden
Location: Santa Cruz County, Arizona.
Length of service: 1867–73.
Description: Open fort with adobe buildings. Only crumbling ruins remain today.
Relevant website:
members.aol.com/cdeichert/ghostfort.html



Living-history experts firing a 12-pounder cannon on the parade ground at Fort Davis National Historic Site. (US National Parks Service)

Coffee's Trading Post
Location: Great Plains Museum, Lawton, Oklahoma.
Length of service: c. 1836.
Description: Replica wooden stockade fort. The exhibit consists of a replicated Red River Trading Post based on Coffee's several forts.
Owner: Oklahoma Museums Association.
Relevant website:
www.museumgreatplains.org

Fort Apache
Location: Near Whiteriver, Arizona.
Length of service: 1870–1922.
Description: Open fort consisting of log and frame buildings, some of which were replaced by stone. Numerous renovated buildings survive today.
Owner: White Mountain Apache Tribe.
Relevant website:
www.wmonline.com/attract/ftapache.htm

Fort Bayard
Location: Santa Cruz County, Arizona.
Length of service: 1863–1900.
Description: Open fort with sod buildings, later replaced by log and adobe. Only crumbling ruins remain today.
Owner: National Historic Landmark.
Relevant website:
www.zianet.com/whisperingcanyon/fort_bayard.html

Fort Belknap
Location: Fort Belknap, Texas
Length of service: 1851–67.
Description: Open fort originally consisting of *jacales*, later replaced by stone. Some original and reconstructed buildings, plus a museum and archives.
Owner: Fort Belknap Society.
Relevant website:
www.ghosttowns.com/states/tx/fortbelknap.html

Fort Bowie
Location: Bowie, Arizona.
Length of service: 1862–94.
Description: Original post was a stone redoubt and the second fort was an open post with adobe buildings.
Owner: National Park Service.
Relevant website:
www.nps.gov/fobo

Fort Burgwin
Location: Taos, New Mexico.
Length of service: 1852–60.
Description: Reconstructed open fort with log buildings.
Owner: Southern Methodist University-in-Taos.
Relevant website:
www.smu.edu/taos/fortburgwin.asp

Fort Chadbourne
Location: Bronte, Texas
Length of service: 1852–67.
Description: Stone-built open fort. Several ruins of buildings remain, plus a small museum.
Owner: Fort Chadbourne Foundation.
Relevant website:
www.fortchadbourne.org

Fort Clark
Location: Fort Clark Springs, Bracketville, Texas.
Length of service: 1852–1946.
Description: Open fort originally consisting of *jacales*, later replaced by stone. Many restored buildings and a museum are present today.
Owner: Fort Clark Springs Association.
Relevant website:
www.fortclark.com/fortclarksprings/index.htm

Fort Concho
Location: San Angelo, Texas.
Length of service: 1867–89.
Description: Open fort originally consisting of wooden frame buildings, later replaced by stone. Many restored buildings, and a museum, remain today.
Owner: National Historic Landmark.
Relevant website:
www.fortconcho.com

Fort Craig
Location: Near Socorro, New Mexico.
Length of service: 1854–85.
Description: Walled fort of adobe and stone, with earthen fortifications. Only heavily eroded ruins remain today.
Owner: Bureau of Land Management.
Relevant website:
www.over-land.com/fortcraig.html

Fort Cummings
Location: Luna County, New Mexico.
Length of service: 1862–73, 1881–86.
Description: Adobe-walled fort, later a tent encampment. Only crumbling ruins remain today.
Owner: Bureau of Land Management.
Relevant website:
www.huntel.com/~artpike/cumming1.htm

Fort Davis
Location: Fort Davis, Texas.
Length of service: 1854–91.
Description: Open fort with log buildings, later replaced by stone. Many restored buildings, and a museum, remain today.
Owner: National Park Service.
Relevant website:
www.nps.gov/foda

Fort Defiance (Goliad)
Location: Presidio La Bahia, Goliad, Texas.
Length of service: 1836.
Description: Reconstructed stone walls and bastions, based on documents and archeological evidence.
Owner: National Historic Landmark.
Relevant website:
www.presidiolabahia.org

Fort Duncan
Location: City of Eagle Pass, Texas.
Length of service: 1849–1920.
Description: Stone-built open fort.
Owner: City of Eagle Pass.
Relevant website:
www.cityofeaglepass.com/history/fortduncan.htm

Fort Gibson
Location: Fort Gibson, Oklahoma.
Length of service: 1867–81.
Description: Wooden stockade and blockhouses, plus later stone-built open fort.
Owner: State Park and Historic Site.
Relevant website:
www.ok-history.mus.ok.us/mus-sites/masnum06.htm

Fort Griffin
Location: Albany, Texas.
Length of service: 1824–90.
Description: Open fort with log and frame buildings, later replaced by stone. Site contains ruins plus replica enlisted men's quarters.
Owner: State Park and Historic Site.
Relevant website:
www.tpwd.state.tx.us/spdest/findadest/parks/fort_griffin/

Fort Huachuca
Location: Fort Huachuca, Arizona.
Length of service: 1877 to present day.
Description: Open fort with frame and adobe buildings. Site contains numerous renovated buildings and a museum.
Owner: US Army.
Relevant website:
huachuca-www.army.mil/sites/about/history.asp

Fort Lancaster
Location: Sheffield, Texas.
Length of service: 1855–61.
Description: Open fort with adobe and stone buildings. Several ruins of buildings remain today.
Owner: State Historic Site.
Relevant website:
www.tpwd.state.tx.us/spdest/findadest/parks/fort_lancaster

Fort Leaton
Location: Presidio, Texas.
Length of service: 1848–1850s.
Description: Fortified adobe trading post. Extensive ruins of buildings remain today.
Owner: State Historic Site.
Relevant website:
www.tpwd.state.tx.us/spdest/findadest/parks/fort_leaton

Fort Lowell
Location: Tuscon, Arizona.
Length of service: 1873–91.
Description: Open fort with adobe and log buildings. Renovated buildings remain today, plus a museum.
Owner: Arizona Historical Society.
Relevant website:
oflna.org/fort_lowell_museum/ftlowell.htm

Fort McDowell
Location: Near Fountain Hills, Maricopa County, Arizona.
Length of service: 1865–90.
Description: Open fort with adobe buildings. Only crumbling ruins remain today.
Owner: Fort McDowell Indian Reservation.
Relevant website:
www.ghosttowns.com/states/az/campmcdowell.html

Fort McKavett
Location: Fort McKavett, Texas.
Length of service: 1852–83.
Description: Stone-built open fort with restored buildings.
Owner: State Historic Site.
Relevant website:
www.tpwd.state.tx.us/spdest/findadest/parks/fort_mckavett

Fort Mason
Location: Mason, Texas
Length of service: 1851–69.
Description: Stone-built open fort.
Owner: Mason County Historical Society.

Fort Phantom Hill
Location: Jones County, Texas.
Length of service: 1851–54.
Description: Open post with log structures and thatched roofs.
Owner: Fort Phantom Foundation.
Relevant website:
www.fortphantom.org

Fort Richardson
Location: Near Fort Worth, Texas.
Length of service: 1867–78.
Description: Open fort with picket and frame, plus some stone structures. Seven original buildings have been restored.
Owner: State Park.
Relevant website:
www.tpwd.state.tx.us/spdest/findadest/parks/fort_richardson

Fort Sill
Location: Fort Sill, Oklahoma.
Length of service: 1869 to the present day.
Description: Open fort with stone buildings. Numerous original buildings have been restored.
Owner: US Army.
Relevant website:
sill-www.army.mil/history/history.htm

Fort Stanton
Location: Near Ruidoso, New Mexico.
Length of service: 1855–96.
Description: Open fort with stone buildings. Numerous original buildings have been restored.
Owner: Fort Stanton Inc.
Relevant website:
www.fortstanton.com

Fort Union
Location: Watrous, New Mexico.
Length of service: 1851–91.
Description: Originally an open fort with log structures; second post adobe-built; site also includes remains of a large Civil War-period earthen redoubt and arsenal.
Owner: National Park Service.
Relevant website:
www.nps.gov/foun/index.htm

Hubble Trading Post
Location: Watrous, New Mexico.
Length of service: 1851–91.
Description: Originally an open fort with log structures; second post adobe-built; site also includes remains of a large Civil War-period earthen redoubt and arsenal.
Owner: National Park Service.
Relevant website:
www.nps.gov/hutr

The Alamo
Location: San Antonio, Texas.
Length of service: 1836.
Description: Fortified stone mission and barracks, plus earthworks and log stockade.
Owner: Daughters of the Republic of Texas.
Relevant website:
www.thealamo.org

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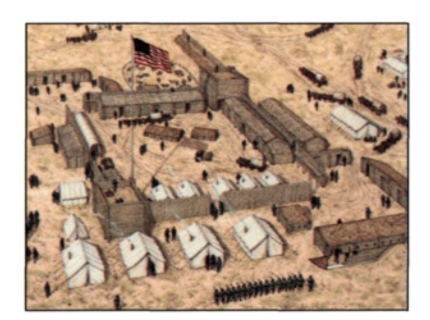
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